

# IN-DEPTH ASSESSMENT OF THE SITUATION OF THE T&C SECTOR IN THE EU AND PROSPECTS

TASK 3: ASSESSMENT OF MAIN DIFFICULTIES  
FACED BY TEXTILE/CLOTHING SMES IN 5  
REGIONS OF THE EUROPEAN UNION AND  
PROSPECTS TO OVERCOME THESE  
DIFFICULTIES.

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## LIST OF ABBREVIATIONS

AiF	Arbeitsgemeinschaft industrieller Forschungsvereinigungen "Otto von Guericke" <i>German Federation of Industrial Research Associations "Otto von Guericke"</i>
ANR	Agence Nationale de la Recherche <i>National Agency for Research</i>
AIPCLOP	Asociación de Industrias de Punto y Confeción (Lugo, Orense y Pontevedra)  <i>Knitting and Clothing Industry Association of Lugo, Orense and Pontevedra</i>
AICEP	Agência para o Investimento e Comércio Externo de Portugal  <i>Agency For Investment and External Commerce of Portugal</i>
ANIT-LAR	Associação Nacional das Indústrias de Têxteis – Lar  <i>National Association of The Hometextile Industry</i>
ANIVÉC-APIV	Associação Nacional das Indústrias de Vestuário e Confecção  <i>National Association of Garment &amp; Clothing Manufacturing Industry</i>
ASM	Associação Selectiva Moda  <i>Selectiva Moda Association</i>



ATP	Associação Têxtil e Vestuário de Portugal <i>Portuguese Textile &amp; Clothing Association</i>
BAPIOT	Българска асоциация на производителите и износителите на облекло и текстил ( БАПИОТ )  <i>Bulgarian Association of Apparel and Textile Producers and Exporters</i>
BMBF	Bundesministerium für Bildung und Forschung <i>Federal Ministry of Education and Research</i>
BMWi	Bundesministerium für Wirtschaft und Technologie <i>Federal Ministry of Economics and Technology</i>
CAD-CAM	Computer aided design – computer aided manufacturing
CETI	Centre Européen des Textiles Innovants <i>European Center of Innovative Textiles</i>
CITEVE	Centro Tecnológico das Indústrias Têxteis e do Vestuário de Portugal  <i>Technological Centre of The Textile &amp; Clothing Industries of Portugal</i>
CM-T	Cut Make and Trim
COINTEGA	Conferderación de Industrias Textiles de Galicia <i>Textile Industry Confederation of Galicia</i>
DFG	Deutsche Forschungs Gemeinschaft <i>German Research Community</i>
DTNW	Deutsches Textilforschungszentrum Nord-West e.V. <i>German Textile Research Centrum North-West</i>

DWI	Deutsches Wollforschungsinstitut <u>an</u> der RWTH Aachen <i>German Institute for Wool Research affiliated to the RWTH University Aachen</i>
EMAS	Eco-Management and Audit Scheme
ERDF	European Regional Development Fund
ENSAIT	Ecole Nationale Supérieure des Arts et industries <i>National School of Arts and Industries</i>
ENSCL	Ecole Nationale Supérieure de Chimie de Lille <i>National School of Chemistry of Lille</i>
ENSMD	École Nationale Supérieure des Mines de Douai <i>National School of Mines de Douai</i>
ESDEMGA	Estudios Superiores en Deseño Textil e Moda de Galiza <i>Higher Studies in Textile and Fashion Designs of Galicia</i>
ETT	Escola Tecnológica Têxtil <i>Textile Technological School</i>
EUROCLUSTEX	Cooperation project ran between ATP, COINTEGA and CITEVE developed under the POCTEEP program
FATM	Forschungsstelle für allgemeine und textile Marktwirtschaft <i>Center for Research in General and Textile Market Economy</i>
FORTHAC	Formation textile-habillement-cuir Association for the textiles and clothing sectors

FUI	Fonds Unique Interministeriel <i>Interministerial Fund</i>
IFKM	Institut für Konstruktions und Funktionsmaterialien <i>Institute for Sturctural and Functional Materials</i>
IfN	Institut für Nähtechnik Institute for Sewing Technology
IFTH	Institut Francais du Textile Habillement <i>French Institute of Textile and Clothing</i>
IGE	Instituto Galego de Estadística <i>Statistics Institute of Galicia</i>
ILT	Fraunhofer-Institut für Lasertechnik Fraunhofer Institute for Laser Technology
INE	Instituto Nacional de Estadística (ES) <i>National Statistics Institute</i>
IPT	Fraunhofer-Institut für Produktionstechnologie Fraunhofer Institute for Production Technology
IRT	Institut de Recherche Technologique <i>Institute for Technological Research</i>
ITA	Lehrstuhl für Textilmaschinenbau und Institut für Textiltechnik der RWTH Aachen <i>Department of Textile Engineering and Institute of Textile Technology of the RWTH University Aachen</i>
LRT metropole	Lorient <i>City in France</i>
MODATEX	Centro de Formação Profissional da Indústria têxtil, Vestuário, Confecção & Lanifícios  <i>Training Centre of the Textile, Clothing and Wool Industry</i>
NPC	Nord-Pas-de-Calais
NP	North Portugal

NPG	North Portugal Galicia
NRW	Nordrhein-Westfalen
PPE	Personal Protective Equipment
POCTEP	Programa Operacional de Cooperação Transfronteiriça <i>Operational Program For Transborder Cooperation</i>
RWTH	Rheinisch-Westfälische Technische Hochschule Aachen <i>Technical University of Rheinisch-Westfalen Aachen</i>
SEPEE	Σύνδεσμος Επιχειρήσεων Πλεκτικής - Ετοίμου Ενδύματος Ελλάδος  <i>Hellenic Fashion Industry Association</i>
SMBs	Small and Medium Brands
SME	Small and Medium Enterprise
TBU	Institut für Textil Bau- und Umwelttechnik  <i>Institute of Civil and Environmental Engineering</i>
TECHTEXTIL	International Trade Fair for Technical Textiles and Nonwovens
TFI	Teppich Forschungsinstitut Institut für Bodensysteme an der RWTH Aachen <i>Textiles and Floorings Institute of the RWTH University Aachen</i>
TIM	Lehrstuhl für Technologie- und Innovationsmanagement der RWTH Aachen

	Technology and Innovation Management Group at the RWTH University Aachen
UKA	Universitätsklinikum Aachen der RWTH Aachen University Hospital of the RWTH University Aachen
UM	Universidade do Minho <i>Minho University</i>
WfK	Cleaning Technology Institute
WZL	Werkzeugmaschinenlabor der RWTH Aachen Laboratory for Machine Tools and Production Engineering of the RWTH University Aachen

## EXECUTIVE SUMMARY

The overall objective of the study is the “assessment of main difficulties faced by Textile and Clothing SMEs in 5 regions of the EU and prospects to overcome these difficulties” so as to provide inputs for designing public support initiatives.

To this end this report assesses the general context in which SMEs are operating, how SMEs view the competitive environment, and how they succeed or fail to overcome current constraints especially in light of the continuing financial/economic crisis. It also investigates how SMEs are trying to reposition their company in order to maintain their competitiveness.

The main finding of this study indicates that phenomena such as globalization (liberalization, delocalization, international outsourcing) and the development of internet-based communication technologies have had a major impact on structure and dynamics of the T/C industry in Europe, and in particular on T/C SMEs. The openness of the

EU market combined with a distribution/retail structure increasingly dominated by very large corporations which consider price as the main competitive factor, generated a major wave of imports from low cost countries, in particular China. As well, delocalization, international subcontracting and/or outsourcing by large European T/C brands contributed significantly to increase in imports from low-cost countries.

As a result the relative competitiveness of the EU-based T/C sector quickly declined causing extensive restructuring and downsizing. The general reshaping of the European T/C industry had, and is still having, a strong impact on the SMEs sector, on the EU T/C specialized regions and their clusters. Namely:

*First.* The value chain of the local T/C industrial systems (be they T/C clusters or specialized areas or regions) based on the territorial proximity of cooperating contractors/subcontractor companies has been disrupted or substantially restructured. The density of internal and short linkages in the clusters has been partially substituted by external and long linkages along the supply chain due to the internationalization of contractor/subcontractor relationships. This process is endangering the traditional Marshallian cluster system, and its subsequent evolution, as well as the structures and facilities that many T/C clusters/regions built during the 1980s, such as: service centres, local industrial associations, marketing consortia and other forms of cooperation among SMEs.

*Second.* According to findings of this Task field research, SMEs access to supporting services is broadly correlated to the stage of development of the cluster. Clusters characterized by a high degree of external independence register an intense flow of relations with local service centres. Access, use and relevance all depend on the quality of service centres and their coherence with both established and emerging needs of local SMEs. While the degree of access might be satisfactory in terms of quantity, the kind of services and assistance required, and valued as useful by SMEs, greatly varies from cluster to cluster.

*Third.* Europe is not homogeneous and this is not due, as in the past, to regional technical or product specialization, but mainly to different levels of entrepreneurship in different regions/areas. In areas where entrepreneurship is well developed such as Flanders, Pas-de-Calais, Prato, N. Portugal, attempts at changing the T/C SMEs sector are underway and seem successful even in the presence of downsizes and consolidation resulting in fewer but stronger enterprises. Where entrepreneurship is not well developed, SMEs are struggling for mere survival and often unsuccessfully.

*Four.* Excluding technical textiles, the overall image of a low-profit, low-innovation industry coupled with low-salary and working conditions for SMEs subcontractors generate a low attractiveness of the T/C business. Key resources such as young professionals and workers, as well as credit, are difficult to find in particular where the T/C sector presents a weak structure. This problem hampers development of the sector and its solution appears as a pre-requisite for any public support intervention. Shortage of skills in both textile and clothing industry industries affects all regions surveyed. Even in regions where trained workers can quickly find employment, enrolment of students in specialized schools and recruitment of young workers remains problematic. While larger companies can organize training in-house, SMEs need to rely on external training facilities.

*Five* The extreme differentiation/specialisation of T/C SMEs is a major characteristic of the SMEs sector, especially for those SMEs which are not CMT subcontractors, as well as for clusters. This high degree of diversity makes it difficult to identify good cases or best practices that can be easily duplicated. Many local (for clusters) or individual (for firms) features are involved in the success or failure of strategies, actions and/or operational behaviours. Human capital is SMEs key asset, the more so since they are almost always family businesses. Human capital directly shapes their businesses and persons have different sets of values, competencies, energies, wills, attitudes. The large diversity of cases arising both from the characteristics of the T/C sector with its many opportunities of

differentiations in businesses and products, as well as from the personal features of the entrepreneurs and their families, requires a better, more effective segmentation of the T/C sector SMEs.

As a result of these findings, in order to provide inputs for public support initiatives, this report proposes a more effective segmentation of SMEs and clusters. The T/C SMEs sector has changed considerably following a general trend of the T/C industry which sees, at the top-end, *large retailers* and *global brands* and, at the bottom-end, very *basic sub-contractors* (CM or CM-T subcontractors). In between are intermediate forms of enterprise evolution: *evolved sub-contractors*, *hybrid enterprises* that manage both a subcontracting business and an own collection or an own product program (for technical textiles), and *small and medium brands* (SMBs). The above segmentation is based on the criterion of *entrepreneurship* and we believe it may be a more meaningful criterion than size alone.

CM subcontractors and SMBs have different key competitive factors and consequently different needs. In general terms subcontractors' key success factor is efficiency, and efficiency requires skilled and motivated workers and strict cost control procedures. Needs are focused on the workforce and required supports are related to matters such as vocational training, labour code, labour flexibility and assistance for cost reduction actions and similar. For SMBs effectiveness is the key success factor: it is supported by R&D, innovation (including innovation in organization and marketing), credit guarantee schemes, marketing support etc. Two very different sets of needs that are overlooked by a size segmentation only. The effort of segmentation done in this report may help to design public support interventions for companies that share similar conditions. In particular this approach may be beneficial to subcontractors, the segment with fewer opportunities of differentiation and which is also the weakest in the European T/C SMEs industry.

Findings of this study indicate that also clusters, aggregations of SMEs, may be segmented according to criteria that are useful for designing support initiatives. Clusters can be considered more or less independent according to the relative weight of own-product SMEs and SMBs in comparison to subcontractors SMEs. Independence of a cluster, which is an expression of the level of entrepreneurship of the area, is an important factor especially in turbulent times when subcontractors, being the flexible part of the industry, are the first to face downsizing and closures. For this reason the degree of independence of a cluster is a significant factor for cluster support measures. A second factor which should be taken into consideration is the degree of consolidation within the cluster. Consolidation is related to the size factor and it occurs when the number of companies is limited and their average size is significant, i.e. numerous medium enterprises instead of many small or micro.

The above clusters' classification provides inputs for modelling cluster dynamics: from low independence/low consolidation to high independence/high consolidation. Therefore public initiatives intended to support cluster development can be designed according to the characteristics of their development stage.

The T/C SMEs sector is still re-thinking itself. As a system it has not yet developed clear guidelines for its own development. The only well established and traceable trend is towards technical textiles which present more defendable barriers to low-cost competition. Within each cluster/region targeted for this study we found attempts being made at reshaping the T/C business; being a sector undergoing change the SMEs segmentation illustrated above may provide a different perspective for developing new input for policy.

## INTRODUCTION

According to the terms of reference *“The overall objective of Task 3 is the assessment of main difficulties faced by T/C SMEs in 5 regions of the EU and prospects to overcome these difficulties.*

In collaboration with DG4, the five selected regions are:

1. Tuscany, in particular the textile cluster of Prato,
2. Northern Greece/South Bulgaria,
3. Eastern Slovakia, in particular the area of Presov,
4. Pas de Calais/Flanders,
5. Northern Portugal/Galicia.

Since three regions are in fact transnational textile and clothing regions, this study encompassed eight EU administrative regions. Each region was analyzed through a desk research (industry hard data and general economic features of the region) and through field work by interviewing local entrepreneurs, managers, T/C experts and, when appropriate, local public officers. In Tuscany (Prato), Northern Greece (Thessaloniki) and Southern Bulgaria (Sofia and Blagoevgrad), Presov (Slovakia), Vigo (Spain) also round tables with local entrepreneurs were organized with the assistance of local T/C associations.

The SMEs report presented in the following pages is introduced here below by a review of SME and Cluster theory in order to better understand the general approach to the questions raised by the terms of reference. The final chapter draws general conclusions and provides suggestions for designing an effective T/C SMEs policy. An updated bibliography on SMEs and business clusters is also provided.

### SMEs AND CLUSTER THEORY

Economic literature studies SMEs subject under two perspectives:

- SME theory considers the individual SME,
- The cluster concept which concerns the aggregation of SMEs.

These two perspectives entail different policy approaches for economic development.

### SMEs

What is an SME? According to EU definition a small or medium size means less than 250 employees, a maximum turnover of 50 million Euros or a balance sheet with an upper limit of 43 million Euros<sup>1</sup>.

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<sup>1</sup> It should be noted that there is an imbalance between criteria, since each of them may select a different group of companies.. A high-tech, composites SME in Germany can easily reach 50 Mln turnover but with far less than 250 workers. A CMT firm in Bulgaria can easily have more than 250 workers but a turnover substantially below 50 mln Euro. And even firms larger than the SME criteria still have characteristics of SMEs in ownership, strategy, structure and culture and, often, in firms with more than



Enterprise category	Headcount	Turnover	or	Balance sheet total
medium-sized	< 250	≤ € 50 million		≤ € 43 million
small	< 50	≤ € 10 million		≤ € 10 million
micro	< 10	≤ € 2 million		≤ € 2 million

This characteristic allows an enterprise to be the objective of specific supporting European policies as detailed in: <http://ec.europa.eu/small-business/>. If for the policy maker it is important to define the perimeter of SMEs policy, for the economist the question is to understand the development and the dynamics of an enterprise: this leads to the fundamental question: why an SME is an SME?

Since at birth most enterprises are small, why do some grow to a large size and others remain small? The first obvious answer is that those that remain small are not successful. They are not able to develop a viable and profitable business idea and they remain small because are unable to accumulate enough resources, capital and knowledge, to foster their development. When an enterprise remains small for its inabilities, it is always at risk of survival and it struggles for profitability. Its smallness originates from a negative cause.

But enterprises may remain small even if they act appropriately. When the market in which they are in is characterized by very low barriers - entry and exit barriers - they operate in a “Walrasian” market of (almost) perfect competition. Prices tend to be equal to marginal cost, or, according to the Boston Consulting Group (the so called BCG 2 matrix), they remain small because of a fragmented sector that is characterized by numerous opportunities of (minor) differentiations which are, however, hardly defendable due to the low barriers. In both the above cases, the origin of small size is lack of significant and defendable differentiation; because of errors in strategy and/or management or for the morphology of the industry.

Differentiation is therefore the driving force both for profitability and development. Still successful differentiation leads to a big size only when the potential market is big as well, otherwise differentiation leads the enterprise to specialization. Growth needs a combination of differentiation and a large market; specialization is the result of differentiation in a small market. A specialized SME is small in its absolute size but is relatively large in terms of market share in its market niche.

The term “monopolistic competition” was first used by Chamberlin and Robinson (1933) to make clear that profitable companies are those that are able to become unique for a group of consumers. Specific features, which may regard either technical and/or psychological aspects, differentiate their offer and, therefore, create a sort of monopolistic situation for a set of needs. This allows a better control on selling price – due to lower demand elasticity - and, eventually, an accumulation of capital and know-how. In this case, small size is a consequence of a niche strategy, and the company is profitable, defendable and based on a well defined business idea. In recent

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50 mln Euro turnover the ownership is predominantly familial, owners are managers and decision making is not formalized or bureaucratic.

times, the same concept was re-presented and updated to the current economic situation by Chan Kin and Mauborgne (2005).

Small size may be an advantageous condition. It boosts reactivity, flexibility, promptness, quick adaptation. It makes enterprises better equipped to stand sudden economic crises or unforeseen scenarios. “Small is beautiful” (Schumaker 1973) became a very successful economic mantra following the first oil crisis. Therefore small size is not, per se, a condition of strength or weakness. However, an absolute small size may be a problem even for wealthy, profitable, specialized enterprises when business factors (inputs) require a minimum threshold for effective and efficient use. Here we refer to inputs such as: credit, knowledge, media communication, public procurement, etc.

### **SMEs in the T/C industry**

The T/C sector offers huge ground for differentiations on numerous dimensions which are both technical (objective) as well as psychological (subjective). Design, materials, models, accessories, distribution systems and brands are all characteristics on which a company can work on for defining its unique positioning. And fashion, by quickly making obsolete old products, enhances, season after season, the potentials for differentiation. Speed of change fosters flexibility and entrepreneurship. Also in technical textiles opportunities for diversification are significant thanks to the flexibility of textile technology to adapt to different materials. The almost limitless opportunities for small or big differentiation might explain the overwhelming majority of SMEs in the T/C sector, and the large share of family businesses. In combination with its characteristic of being labour intensive, at least in the clothing/final segments, it emphasises the specific social dimensions of this sector.

The restructuring process in the European T/C industry has also generated SMEs as the result of downsizing policies. There are “new” SMEs (e.g. in technical textiles) that are spin-offs or remnants of larger groups or last survivors in very specialized niches that restructuring has brought back to SME size (see the case of lace in Flanders)

### **SMEs and Europe**

The European Commission puts forth in the “Small Business Act for Europe” ([http://ec.europa.eu/enterprise/policies/sme/small-business-act/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm)), a set of 10 principles to guide the conception and implementation of policies both at EU and Member State level. These principles are essential to bring added value at EU level, create a level playing field for SMEs and improve the legal and administrative environment throughout the EU:

1. *Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded*
2. *Ensure that honest entrepreneurs who have faced bankruptcy quickly get a second chance*
3. *Design rules according to the “Think Small First” principle*
4. *Make public administrations responsive to SMEs’ needs*
5. *Adapt public policy tools to SME needs: facilitate SMEs’ participation in public procurement and better use State Aid possibilities for SMEs*
6. *Facilitate SMEs’ access to finance and develop a legal and business environment supportive to timely payments in commercial transactions*
7. *Help SMEs to benefit more from the opportunities offered by the Single Market*
8. *Promote the upgrading of skills in SMEs and all forms of innovation*
9. *Enable SMEs to turn environmental challenges into opportunities*
10. *Encourage and support SMEs to benefit from the growth of markets*

European economic policies also promote networking and partnership among SMEs in order to overcome the problem of limited resources in a globalized economy.

See: ([http://ec.europa.eu/enterprise/policies/sme/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/index_en.htm)).

This brings forth the second issue: aggregation of SMEs or the concept of business cluster.

### Cluster Theory

*A Cluster (or business/industrial cluster or industrial district)* is an aggregation of enterprises related to:

- A specific industry (traditionally a manufacturing sector, nowadays any industry),
- A specific territory (town, region or any identified geographical area),

and maintains a high degree of inter-connections within that industry/area.

In economic theory, the first author to introduce the term Industrial district was Alfred Marshall in two different works (1890/1920). He made clear that industrial districts foster efficiency by creating positive externalities in a free market economy environment.

Common externalities are:

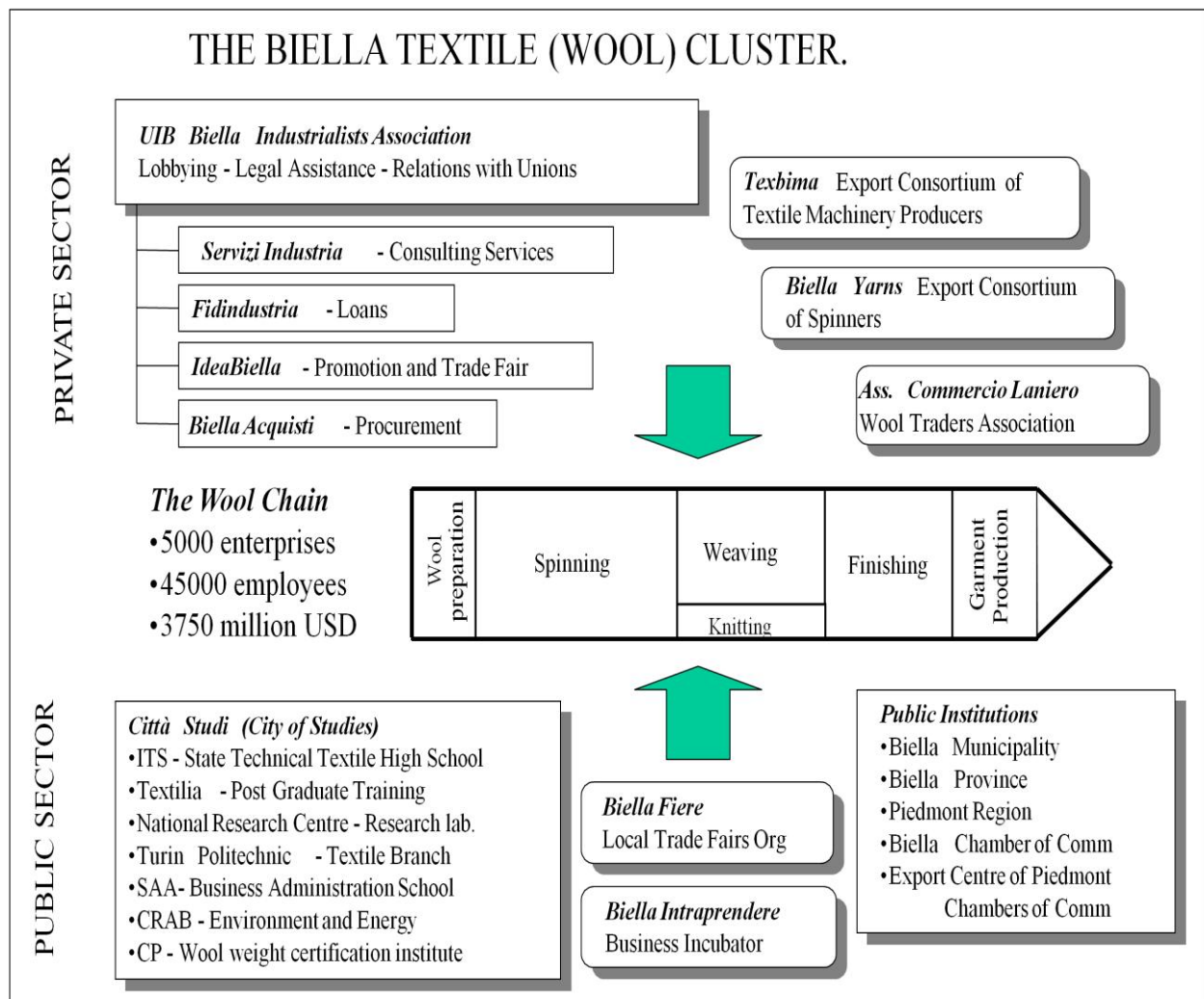
- Availability of skilled workers, often fostered by local vocational schools and colleges,
- A social business attitude which ensures a high degree of entrepreneurship in the area,
- Continuous flow of information - technical, market, innovation,
- Cost savings in common services such as: logistics, technology, second-hand machinery for start-ups, waste management etc.
- Easier credit access from local banks with deep knowledge of the business and of the social situation.

All this increases the competitiveness of local companies. Indeed, the industrialization process in Europe is characterized by industrial districts and the T/C industry in particular presents numerous, historical examples such as Manchester, Flanders, Lyon, Tuscany. During the 1970s, especially in Italy where SMEs are the backbone of the economic system, the Marshallian manufacturing districts, present in Italy since the Middle Ages, evolved towards a more organized configuration. This evolution was necessary to respond to an increasing demand for quality by large buyers (retailers) such as Marks & Spencer in England, Galeries Lafayette in France, la Rinascente in Italy, Hertie/Karstadt/Arcandor in Germany. Small manufacturers (SMEs) were challenged by their increasing demand for quantity and quality. Their answer was to self-organize by improving shared activities and facilities: that is by emphasizing internal cooperation as well as specialization.

Economists became aware of these new developments since the late 1970s. The front-runner being prof. Beccatini of University of Florence (Tuscany hosts important clusters in the fashion/luxury goods) who was the first scholar to emphasize that spontaneous cooperation among specialized SMEs in a highly interactive contracting/subcontracting territorial system fosters quality, specialization and customization and makes them the key success factors of the industrial district competitiveness (1978). The former Marshallian industrial district providing cost benefits through externalities became an articulated local system capable to increase competitiveness of SMEs by fostering quality, innovation, specialization and differentiation.

The following figure is an example of the articulation and complexity of a mature T/C cluster in the Piemonte Region, Italy.

Figure 1: The Biella Textile (wool) Cluster



Source: F. Pellizzari in cooperation with the Biella Industrialists Association in the framework of TACIS project “Rehabilitation of the Wool and Flax Chain in the Russian Federation”, 1997.

Prof. Michael Porter gave international recognition to the cluster as an important issue for economic development and regional/sector competitiveness when studying the competitive advantage of Nations. In his book “The competitive advantage of nations” he demonstrated that business clusters significantly enhance specialization, efficiency and innovation therefore fostering the competitiveness of SMEs and of an entire nation. His latest definition of cluster (1998) indicates:

“An industrial cluster is an agglomeration of companies, suppliers, service providers, and associated institutions in a particular field. Often included are financial providers, educational institutions, and various levels of government. These entities are linked by externalities and complementarities of different types and are usually located near each other. Because of their proximity—by geography and activities—cluster constituents enjoy the economic benefits of several location-specific externalities and synergies. Such benefits include access to specialized human

resources and suppliers, knowledge spillovers, pressure for higher performance in head-to-head competition, etc. Moreover, through these linkages, one cluster is inevitably linked with others and to the overall economy.

Since the diffusion of Porter studies, cluster is a key issue for several matters regarding economic policy and in particular: for regional development, innovation and entrepreneurship.

Today (Amisse and Muller, 2009) two logics lie at the root of a cluster's dynamics.

- *The professional logic corresponds to the capacity of firms to identify common objectives of immediate interest and to collaborate for their attainment on a short-term time horizon. This logic is defined as Porterian; it encompasses a rather top-down approach and considers the cluster as a "super-firm" that can be managed and conducted towards planned goals. Often a cluster manager is foreseen as leading the cluster development process.*
- *The historic logic corresponds to the construction of patrimonial alliances participating to the coordination of the members of the industrial network through the multiplication of informal contacts and of tacit mutual assistance agreements. This logic rests on the construction of trustworthy relations, thus requiring long-term relationships. This perspective is mainly supported by the Italian literature and it envisages a rather bottom-up approach and policies are targeting the general framework or the fundamental conditions of the cluster. It considers the cluster as a complex system that self-organizes. It requires time and can only be considered in a long-term perspective.*

National cluster policies are grounded on these two different logics. The French (2004), British (DTI 1998) and Belgian (2005) policies make explicit reference to Porter while the Italian law (1991) is influenced by prof. Beccatini perspective and the Spanish and Portuguese seems to combine the two. The European Commission policy considers business cluster as a key factor for innovation.

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## OBJECTIVES

The overall objective of the study is the "assessment of main difficulties faced by T/C SMEs in 5 regions of the EU and prospects to overcome these difficulties".

- to assess the general problems that SMEs are pre-facing because of "all-encompassing" phenomena such as globalization and the financial/economic crisis (2008-2010). This part of the study shall highlight the general context that all SMEs have to cope with,
- to identify paradigmatic situations or cases (in terms of regions/clusters and SMEs) that, for their clarity, or special conditions, may highlight new developments and/or unprecedented business conditions for SMEs. This part will provide inputs for designing support initiatives targeting specific problems in order to understand how SMEs:
  - see the competitive context
  - overcome constraints
  - reposition the firm by learning or (dis)investing
  - are hampered in their change by institutional factors.

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## METHODOLOGICAL ASPECTS

In order to meet the requests of the Terms of Reference in collaboration with DG4, five regions were selected for Task 3:

1. Tuscany, in particular the textile cluster of Prato,
2. Northern Greece/South Bulgaria,
3. Eastern Slovakia, in particular the area of Presov,
4. Pas de Calais/Flanders,
5. Northern Portugal/Galicia.

Since three regions are in fact transnational textile and clothing regions, this study encompassed eight EU administrative regions.

Each region was analyzed through a desk research (industry hard data and general economic features of sector in the region) and through field work by interviewing local entrepreneurs, managers, T/C experts and, when appropriate, local public officers. In Tuscany (Prato), Northern Greece (Thessaloniki) and Southern Bulgaria (Sofia and Blagoevgrad), Slovakia (Presov), Spain (Vigo) also round tables with local entrepreneurs were organized with the assistance of local T/C industry associations, textile experts and service providers.

### 1.1 BACKGROUND

The Prato cluster currently encompasses the tiny province of Prato - which became autonomous from Firenze province only in 1992 - including Prato city with about 150 000 inhabitants, and seven surrounding municipalities in the Firenze and Pistoia provinces. It is one of the largest and oldest textile cluster in Europe, its origin going back to the XIII century. Traditionally Prato was known as the carded wool district with a clear specialization in the upstream segments of the textile value chain: fibre preparation, yarn and fabric production. Prato was also known for its unique ability to regenerate used (second hand) woollen rags as raw materials.

For a very long time this area has been functioning as a cluster of highly specialized SMEs (micro and small) who cooperate along the chain in an articulated system of specialized subcontractors. Efficiency of the system (low costs) was provided by competition among subcontracting firms having the same specialization; high effectiveness (outputs) was ensured by the cooperation along the textile chain between contractors and subcontractors.

Until the mid 1970s this business model positioned Prato as the cheap, low-end wool cluster in Italy, far away from the Veneto wool cluster of Valdagno (Marzotto et alia) and the more reputed Piemonte wool cluster of Biella (Zegna, Loro Piana et alia). Large companies have been and still are absent in Prato. By the end of the 1970s, Italy became a major global player in fashion and many Italian brands positioned themselves at the top-end of the markets. Prato, with its “poor and heavy” carded products had to reinvent itself if it wanted to share in the international success of Italian fashion.

Taking advantage of the high flexibility of its carded technology combined with widespread technical know-how in the cluster, and the natural cultural attitude to creativity of the surrounding area, Prato quickly changed its output and became an innovative supplier of yarns and fabrics for the fashion industry worldwide. The use of regenerated yarns was almost totally abandoned, wool was partially substituted by, or combined with, other kinds of materials (natural, artificial, synthetic fibres). Sophisticated techniques for dyeing and finishing (nobilitation) became a specific feature of the cluster. Prato’s market re-positioning was facilitated by the nearby presence of Firenze as a strong textile/clothing international marketing place with the Pitti Exhibitions attracting buyers from the whole world. This vicinity facilitated a growing presence of the fashion/apparel segment which, by tradition, was absent or negligible.

Though the main products and the market positioning changed significantly, the cluster maintained its usual morphology of a system composed by a very large number of micro and small firms and maintained its vitality approx until the year 2000 reaching about 10 000 firms in a tiny area of 700 km<sup>2</sup> and a total cluster population of about 280 000 people. Total employment was about 48 500, only a small reduction compared to 50 333 units registered in 1991. This indicated a strikingly different development pattern compared to that of many other European T/C regions which were already facing a protracted decline.

Table 1: Prato Textile District: companies active in the Textile/Clothing sector (I° Quarter 2011)

Activity	Sole proprietorship	Partnerships	Joint-stock companies	Others	Total Companies	Craft companies
<b>TOTAL Textile companies</b>	<b>1.221</b>	<b>811</b>	<b>1.070</b>	<b>2</b>	<b>3.104</b>	<b>1.801</b>
Not classified	0	4	11	0	15	0
Yarn	239	262	276	0	777	416
Fabrics	442	318	420	0	1.180	692
Finishing	296	97	160	1	554	355
Other textiles	244	130	203	1	578	338
<b>TOTAL garment companies</b>	<b>3.740</b>	<b>308</b>	<b>492</b>	<b>3</b>	<b>4.543</b>	<b>2.806</b>
Not classified	0	2	2	0	4	0
Garment items (excluding furs)	3.482	171	340	2	3.995	2.488
Fur apparel	11	7	7	0	25	16
Knitting products	247	128	143	1	519	302
<b>Total</b>	<b>4.961</b>	<b>1119</b>	<b>1562</b>	<b>5</b>	<b>7647</b>	<b>4607</b>
% on total companies	65	15	20			

Source: Chamber of Commerce of Prato

At present there are approximately 7 600 registered textile and clothing companies in the Prato district of which 60% are garment making. Sole proprietorship companies are 65% of the total while limited liability companies are only 20%. Considering the additional 4 600 registered craft companies (up to a maximum of 38 employees) it is evident that the backbone of the Prato district is made up of very small, small and few medium companies, interdependent on each others, and specialised in specific activities or processes such as spinning, weaving, dyeing, finishing, printing, etc.

Quite often the complete cycle is coordinated by “impannatori”, independent figures who deal with research and design of samples, with organisation and control of production subcontracted to craft companies, and with marketing and sales of finished products. Likewise medium-sized companies operate in collaboration with a large number of sub-contractors – micro or craft companies – who provide both highly specialised skills in certain production phases/processes, as well as great flexibility in capacities. This is the prevailing business model also today in the Prato cluster.



## 1.2 ANALYSIS OF CURRENT SITUATION AND MAIN PROBLEMS

### 1.2.1 RECENT DEVELOPMENT

At the beginning of the new millennium Prato was still known as the “carded wool specialist” in the global market, although it presently covers all the segments of the fashion manufacturing chain (from yarns to apparel) as shown by the data on turnover and exports (see table below). In 2001 this state of affairs started to reverse, due to a combination of effects that accelerated structural changes in the textile/clothing sector worldwide.

On the economic level, the main drivers of change were:

- the fall in demand which particularly hit its geographic markets, first of all Germany, and the market segments of reference for Prato companies (medium-to-high end consumption),
- China entry into WTO in 2001 and the end of the Multifiber Agreement in 2005,
- the abrupt fall of the US dollar against the euro and of other connected currencies, especially the Chinese renminbi.

On the structural level, changes were driven by:

- the stronger role of distribution networks and brand names, which favoured the concentration of operators, the international expansion of their range of action and the downstream shift of the processes that produced “value” and hence economic power,
- the increasing international integration of emerging economies with strong manufacturing base, large production capacities and lower factor costs (also characterized by asymmetric competition);
- the interactions between the two latter factors that led large apparel distributors and global brands to mainly source in low cost countries.

The resulting new scenario put forward new challenges that Prato, as many other European manufacturing districts and sectors, struggled to meet successfully. When the cluster started to lose competitiveness and turnover, a phase of radical restructuring was necessary; this phase is still underway today.

Prato entrepreneurs and local representatives of the cluster, such as employers associations, trade unions, chamber of commerce, local administrators and also local intellectuals, give particular importance to the business environment and the spread of illegal business practices over the last two decades for explaining - at least partially - the competitive decline of Prato.

During the roundtables and the meetings held locally, entrepreneurs and representatives of the Prato industrialists association have mentioned the following as main causes of decline:

- lack of reciprocity in international trade. Imports in the EU are free from constraints, while exporters to China, USA and other large or emerging markets still face significant tariff and non-tariff barriers,
- marked asymmetry between requirements for products produced in the EU and those imported in terms of labour regulations, environmental protection, consumer safety leading to loss of cost competitiveness of Made in Europe products. In addition since no origin labelling of T/C is required consumers have no possibility to distinguish products that are produced complying with all EU legislations from products that are not.
- almost non existent customs controls for imported products to verify compliance with European regulations,
- unfair competition in the fashion segment due to counterfeiting, poor enforcement of design and style property rights,

In their opinion all these elements combined to create an adverse framework in which many entrepreneurs have been feeling helpless. And this is a framework which is generally perceived to be so unfair that it has been extremely difficult to design and implement effective business strategies at firm level as well as at cluster level.

Prato's textile and clothing industry underwent widespread downsizing in terms of companies, workforce, turnover, and exports. It is estimated that today installed production capacity in yarns and fabrics is about 30-25% of the level reached at the end of the 1980s. For example, in 1987 the number of spinners was 617; today they are 98, although there were very few cases of acquisition. Like most European T/C manufacturing industry, the Prato fashion cluster suffered a continuous downgrading of its attractiveness and during the last decade the generation change of those entrepreneurs who contributed to the boom years of the 1970s and 1980s has impoverished the cluster. Many of the sons and daughters of that successful generation have chosen to invest in different sectors (real estate, tourism, etc) or different type of careers.

However despite the restructuring and the significant internal transformation Prato remains one of the strongholds of the European T/C industry as the following tables shows.

**Table 2: Textile/Clothing Employment, Turnover, Exports in the Prato District - 2010**

	<b>Textiles</b>	<b>Clothing Knitwear</b> and	<b>Total District</b>
Labour Force	18.700	11.000	<b>29.700</b>
<i>% Industrial Labour Force</i>	<i>81%</i>	<i>53%</i>	<b><i>74%</i></b>
Total turnover (in millions of Euros)	3.005	1.348	<b>4.352</b>
Exports (in millions of Euros)	1.522	703	<b>2.225</b>
<i>% export over turnover</i>	<i>51%</i>	<i>52%</i>	<b><i>51%</i></b>

*Source: Unione Industriali di Prato*

Official data underestimate the actual magnitude of the textile/clothing business due to widespread areas of informal economy, particularly, but not exclusively, in the ProntoModa cluster.

Table 3: Turnover and Export, Prato District

	2008 (000 Euro)	2010 (000 Euro)
<b>Turnover</b>		
• Textiles (yarns/fabrics)	3.200	3.005
• Apparel/Knitwear	1.245	1.353
Total Turnover	4.445	4.353
<b>Exports</b>		
• Textiles (yarns/fabrics)	1.705	1.522
• Apparel/Knitwear	594	703
Total Turnover	2.299	2.225

Source: *Unione Industriali di Prato*.

The main export markets, as % on total export per product, are (2010):

- Yarns/Fibres: Hong Kong 17,0%, Romania 13,3%, Germany 12,4%.
- Fabrics: Germany 14,8%, Spain 10,3%, France 8,5%
- Apparel: France 29,0%, Germany 16,2%, Spain 6,2%
- Knitwear: France 22,3%, Spain 21,8%, Germany, 10,6%

So far, it seems that the recent global financial crisis did not substantially weaken the cluster as a whole. Aggregate data show that the recovery from pre-crisis results is almost complete and the whole of Prato is still capable of generating a yearly turnover of 4.5 billion € and export more than half of it; this means that, beside closures and liquidations, a significant number of firms have been able to react to structural as well as to contingent challenges.

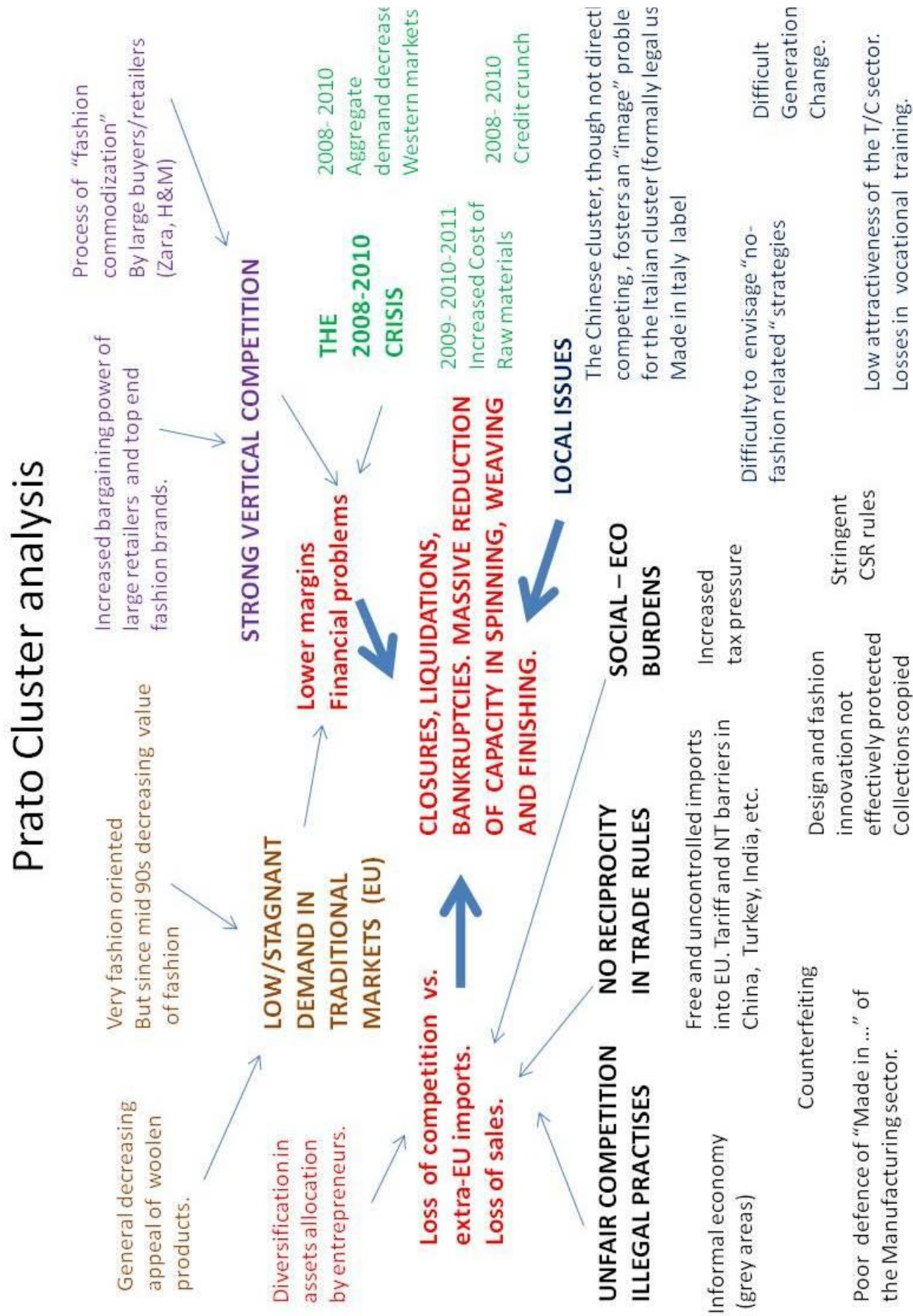
The following figure summarizes the main forces that are currently shaping the Prato cluster. It displays the system of causes and effects that led the Prato textile cluster to a massive downsizing with closures, bankruptcies, liquidation (the statement at the centre of the exhibit). This outcome was generated by three groups of causes:

- Lower margins and consequently financial problems due to vertical competitive pressure of large buyers (strong vertical competition) combined with a loss of competition vs extra-EU imports (horizontal competition) emphasized – according to a widespread opinion - by various unfair practices and no reciprocity in international trade rules. A third cause that affected Prato competitiveness stems from alternative portfolio asset allocations by local entrepreneurs in different industries/sectors due to decreasing margins in T/C.
- Low or stagnant final demand in traditional markets, Europe in particular, hit two segments where Prato holds a leading position: fashion (lower social value of fashion by mid 1990s) and woollen products.

- Local issues such as: the presence of a large Chinese Pronto Moda cluster perceived as damaging the image of the cluster and of the Made in Italy label; and the cultural lock-in that hinders the appreciation of non-fashion opportunities such as technical textiles that, on the contrary, could take advantage of the extreme flexibility of carded technology.

Figure 2 below tries to visualize the systemic and polymorphic characteristics of the crisis that is exacerbated by the current financial constraints that only add contingent momentum to long standing causes.

Figure 2: Prato Cluster Analysis



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### 1.2.2 THE PRONTO MODA CHINESE CLUSTER

Concurrent to the decline of the traditional Prato cluster, a parallel cluster of firms owned by recent Chinese immigrants in the Prato area developed in the ProntoModa segment. ProntoModa originated as a cheap and low-quality production of up-to-date garment collections offering great versatility and fast delivery. Every week new models are introduced, quickly following the latest fashion trends.

Starting from the early 1990s a strong flow of Chinese immigrants settled in the Prato area, almost all of them were from the Wenzhou region in South-East China for a current estimated population of 25.000<sup>2</sup> (both resident and estimated un-registered) mainly in Prato city making it the 2<sup>nd</sup> largest Chinese community in Europe after the one in Paris. Almost all of them are either entrepreneurs (the vast majority in Pronto Moda) or workers in Chinese-owned companies. Currently, there are about 3500 Chinese-owned registered firms which deliver “ProntoModa” apparels to European customers in the low-end segments. Several inquiries of the Italian fiscal police demonstrate that the Chinese firms operate in a sort of self-contained industrial enclave with a majority engaged, totally or partially, in illegal practices such as unregistered workers, and tax evasion. The number of un-registered Chinese-owned companies is estimated to be high, indirectly witnessed by a yearly replacement rate of over 60% that makes it possible for companies to avoid compliance with Italian and European laws<sup>3</sup>.

During the last 10 years imports of textiles, mainly fabrics, from China increased by 3000% and low labour costs were greatly dependant on widespread utilisation of Chinese workers with 3-month tourist visa and no labour guarantees and protection. Earnings and profits were repatriated to China and the Italian fiscal police estimates that 4,5 billion Euros have been remitted to China during the years 2006-2010 from the Prato area through money transfer bureaux<sup>4</sup>. The estimated turnover of the Chinese cluster in Prato is about 2 billion per year for a total production of estimated 360 million pieces and the Regione Toscana (6 Oct. 2008) estimated that more than half was from unregistered companies.

Obviously, accurate statistics and solid quantitative evidence of this phenomenon are extremely difficult to collect.

In practice, at present in Prato there are two parallel clusters:

- The “traditional” Prato cluster mainly in the fashion textile segment of the chain, that is spinning, weaving, finishing and top-end clothing,
- the Chinese cluster mainly operating in the low-end ProntoModa segment.

The two clusters are very different in terms of products, positioning and business models but both can qualify for the Made in Italy label for their products. According to the producers of the traditional Prato cluster this has a marked negative impact on their image as high-end manufacturers and in general it is considered to damage the reputation of the Made in Italy production. Additionally, the non-enforcement of labour and fiscal regulations by Italian local and national authorities has generated protracted tensions and unresolved problems between the 2 clusters.

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<sup>2</sup> Nomisma “Idee per il futuro del distretto pratese” 2007

<sup>3</sup> Silvia Pieraccini “Assedio cinese” 2008 Edizioni Sole 24 ore

<sup>4</sup> Ibid.

### 1.3 DEVELOPMENT OF CLUSTER AND SMEs SUPPORTING SERVICES

The area has a long tradition of industry associations, service centres and other bodies operating in the Prato cluster supporting the activities of local SMEs. The oldest and most popular are the **Unione Industriale di Prato**, the Prato Chamber of Commerce and Industry, the **Confartigianato** (Association of Craft companies), the **Buzzi Technical Institute**. The **Unione**, **Confartigianato** and the Chamber are themselves members of various committees and bodies of local authorities and banks, in order to promote and defend the interests of their member companies, and they participate in the promotion and establishment of other service centres whenever the need arises for a type of service that cannot be sourced by the individual company. The origins of these centres/consortia are generally bottom-up, and their relevance and performance tend to be closely monitored by local companies and industrial associations. Some of them are permanent while others are set up to meet a specific need or problem and are dismantled when the purpose is served.

Here below is a sample that can give an idea of the high degree of articulation of the cluster structures:

**Unione Industriale di Prato** is a local employers association whose voluntary membership since 1912 is made up by local companies, the vast majority belonging to the T/C sector. It represents their interests and operates to provide them with different types of services through a variety of centres and consortia. **Confartigianato di Prato** is from 1950 a voluntary association of craft companies with 5000 member companies in the area. Through these two bodies most of the support from EC and national government is channelled to local companies

**Museo del Tessuto di Prato**. It is entirely dedicated to the textile art and technology and has a vast textile endowment in terms of quality and variety of collections and has the goal to preserve the cluster cognitive heritage. This makes it possible for local companies to complement their own archives of previous collections, designs and patterns and represents an extremely important source of inspiration for their new creations, and the never-ending needs of creativity for their twice-a-year collections.

The local **Textile Technical Institute Buzzi**, established in 1886, still has a high reputation for training generation after generation of highly specialised textile technicians.

Other selected service centres providing services to the Prato cluster are:

**Tekin 2000**, Training Agency of **Unione Industriale Prato** provides training courses to entrepreneurs and employees of the cluster companies and has the objective to match demand and supply of skills. It carries out analysis of training needs and employment opportunities, provides information for company internships. **Tekin 2000** has direct contact with the National school system, at secondary and University level.

In terms of advanced training the **Milan Polytechnic** together with the **Group of Young Entrepreneurs of Unione Industriale di Prato** offers a Masters degree in Innovation and Strategy dedicated to management in the textile and clothing sector. At the **University of Florence** a Master degree in Textile Technology and Management is organised in collaboration with **Unione Industriale Prato**.

**CediSerin srl** provides ICT services to cluster companies, such as: office automation systems, accounting, and is the internet service provider of the Union and its member companies.

There are also private companies that provide crucial services for T/C companies. For example **Tecnotessile** is a research company in the areas of industrial automation and prototyping, electronics and process control, textiles



technologies, chemicals treatments and finishing. It provides laboratory tests, training, and management of large, multidisciplinary research projects.

In the Prato cluster several consortia, made up by groups of cluster companies with common objectives and needs, are operating:

**Consortium for the promotion of Cardato**, aims at promoting textile carded products (the main products in the Prato area) by developing research and development activities, by circulating information on its ecological and self-sustainable characteristics with the general public and by helping companies to obtain the ecolabel for carded products.

**Consortium for the promotion of Yarns** made up by companies producing knitting and textile yarns. It operates by supporting the development of new trends and continuous innovation, participation to trade fairs, promotion events, as well as workshops on International markets. It cooperates with Polimoda, the school for young designers and stylists in Florence, the Fashion Institute of Technology in New York, and Osaka Fashion Bunka College.

**Pratotrade** a consortium with 80 companies of the Prato cluster producing high-quality, innovative textiles for garments. Its main activities are:

organisation of **Prato Expo** in Milan for presenting seasonal collections and **PRIMA Moda Tessuto** in Florence for previews of the textile collections, and promotion of sales of textile products and promotion of the image of the Prato cluster in Italy and abroad, provision of technical assistance to member companies in international activities including foreign legal services.

**Consortium TEXMA Prato International** aimed at promoting mechanical industries of the Prato cluster, grouping 28 companies covering all the mechanical textile specialisations. In order to promote contacts with buyers it developed a virtual trade fair in its website.

Consortium **Prato Energy** created in 1999 with the aim to enable member companies, with yearly energy consumption over 500.000 kwh, to take advantage of the liberalised energy market and negotiate lower price for energy supplies. As similar consortium groups small and micro companies with no limit of energy consumption has now over 1500 members.

**Confidi Imprese Toscane** (a non-profit cooperative society based on mutualistic principles) provides collective guarantees aimed at facilitating access to credit, at the best possible conditions, of local SMEs. It works by stipulating conventions with banks and leasing companies for short and medium term credit.

## 1.4 REACTION AND STRATEGIES

### 1.4.1 COMPANY STRATEGIES

It should be noted that the large number of firms in the cluster allows a vast array of individual strategies and in fact several kinds of company's responses can be found. Apart from those firms who decided - or were compelled - to close down their business, the strategies adopted by Prato-based enterprises can be divided into four main groups:



- Passive strategies,
- Cost-reduction strategies,
- Pro-active and innovative strategies,
- Integration with “ProntoModa ” Chinese cluster.

### **Passive strategies.**

These strategies are quite widespread and their objective is mere survival. Unable to design a response either for lack of resources or for psychological attitude these entrepreneurs have decided simply to resist until new opportunities appear or a new scenario arises. This strategy is based on simple factors: cost cutting and foregoing profits and, sometimes, even markedly reduced personal income of the entrepreneurs. Passion for their work, attachment to the company, sense of responsibility for the workforce are (all still quite widespread in a tightly-knit society such as Prato) are the only positive forces that nurture this strategy. Obviously passive strategies are purely defensive, risky on the long run, and can hardly be defined as entrepreneurial.

Nevertheless, they may have a positive outcome in the near future since some recent developments seem to suggest that hyper-competition from Chinese-made products is decreasing. Causes are structural: a national economic policy now gradually turning to develop the domestic market, raising production costs caused by wage increases and domestic inflation (over 5,5% in 2010), decreasing reliability of deliveries, inadequacy of the order-delivery cycle of products sourced in China compared with the current time requirements of the fashion/garment business in Europe. In addition, other high-competition areas are currently experiencing difficulties and losing attractiveness, in particular the South Mediterranean countries, due to political/social unrest.

Those Prato enterprises who managed to resist and survive, may now be ready to take advantage of the new opportunities.

### **Cost Reduction Strategies.**

Some medium-sized companies tried to reduce costs by delocalizing part of their production in China or in some Eastern European country, in particular Romania. Such strategies were not always successful. The size of companies - particularly those too small for sustaining a delocalization strategy - the entrepreneurial “cluster” culture as well as managerial shortcomings are substantial obstacles for the majority of firms. Examples of successful delocalization are: Industria Italiana Filati, Bivafil and LDS Lineaessee.

An alternative, simple, widespread way to keep cost/price competitiveness was to reduce the production phases, by limiting them to the finishing phase both for yarns and fabrics, which were mostly bought in China in their raw, untreated form. This strategy however is significantly impoverishing the business model; it is based on radical downsizing, lay offs and disrupts the traditional cluster linkages. In its extreme form, this strategy will end up by reducing activities of a company to outsourcing and trade.

### **Proactive strategies.**

Proactive strategies are those which reacted to the new scenario trying to take advantage of new opportunities. Once again successes and failures can be found and according to the opinion of many local experts failures are mainly due to size. In other words, they are the result of an unbalance between the minimum volume requirements needed in the global economy and the actual resources that the average company in Prato can field.

A negative example of some significance is Sasch which went bankrupt in November 2010. Sasch's owner, Mr. Cenni, is currently the Mayor of Prato. Mr. Cenni was reputed a modern entrepreneur who reacted bravely to the new global and liberalized scenario. He diversified his business downstream by creating a fashion brand (Sasch), a branded retail chain; he partially delocalized production in China and started the internationalization of his company. Sasch did what many business strategy books suggest to do. But they failed. Over-extension of the business - geographical as well as in product diversification and marketing activities – proved to be un-sustainable for a relatively small enterprise which reached a maximum of 120 mln. Euro turnover in 2008 and had fewer than 200 direct employees in Prato. The global financial crisis with its fall of demand in Western Europe and credit crunch, may have played a significant role as well.

According to representatives of - Unione Industriali di Prato - most successful companies are those that have adopted “reduced-haul” strategies; that is companies that concentrated their resources only in fields that they could preside over with distinctive competencies. This meant actions such as:

- focus on few, well known markets and customers, often the closest ones both geographically (local or Italian customers) and in terms of market position,
- narrow the production scope to those products where own technical know-how was really outstanding;
- increase quality often by integrating some critical production phases (at least for the delivery of the season collections) and, finally,
- reduce the size of the collection in order to better orientate customers' choices and reduce supply (offer) redundancy as well as costs.

The presence of young members of the entrepreneurs' family in the management of a company tends to be a common feature of successful companies.

In summary, the most successful companies were those that applied strategies with a limited scope; that is, in apparent contradiction with the widespread push to globalise, they have reduced their range of action and have concentrated on some strategic areas, combinations of products, technologies and markets well known by the companies. It should be underlined that the considerations above are not based on a statistical research but on the opinions of those who, everyday, monitor the cluster situation from a privileged standpoint as representatives of local entrepreneurs. It should also be added that the large universe of enterprises in Prato makes it possible to find very different and contradictory cases; proving that strategies are not good or bad *per se*, they become good or bad when put into practice by an individual firm.

Herebelow are some examples:

- *Vertical integration for improved quality*

Two years ago Bemiva srl decided to purchase a local spinning mill for a stronger vertical integration of their production. This was a strategic move in clear contradiction with the general trend, based on closures and delocalisation. The entrepreneur intended to increase control over quality of its products which target the top-end market (luxury segment). Helped by the positive cycle of wool the company was in a position to pay-back the investment in less than 18 months, significantly improved its value added, and strengthened its market positioning.

- *Focus on the traditional carded wool.*

Ultra srl is specialized in carded wool. As many other Prato producers in the last two decades, the company offered its products (fabrics) to the fashion industry by providing large collections, design, colour innovation, new mélange

and mixed fibres. That is, by extremely articulating its product mix. The family-based management of the company realized that the costs of such efforts were not repaid by the price that customers, such as large fashion brand names or international retailers, were prepared to pay. Therefore they decided to review their business model refocusing on a different segment: less “fashion” more “value for money”. As a result of this decision collections have been designed for more “basic utilization”, they were significantly reduced in terms of variety of articles, the product quality was improved. The average selling price decreased but since the decrease in average unit costs was higher the company has been recovering from its previous bad years. Currently sales are increasing in quantity and the total value added generated by the new collections doubled.

- *Hyper- focused strategy to create an own-brand.*

The Faliero Sarti company, founded in 1949, was, and still is, a medium size wool spinner. Taking advantage of the design skills of the niece of the founder (all in the family), in the late 90s the company initiated its own branded collection of accessories - scarves and shawls. These products are placed at the market top-end for quality and image, targeting the luxury segment. The success of the collections convinced the owners (2 generations of the same family) to open branded outlets in some fashionable Italian resorts such as Cortina d’Ampezzo in the Alps, Porto Rotondo in Sardinia, Firenze and Milan. The qualifying characteristic of the strategy is a very strong focus on few key points:

- Hyper-specialized and narrow product mix,
- top quality, innovative design, positioning as trend setter,
- target of top-end segment of the market,
- carefully selected selling locations,
- Controlled haul-extension (production is in Prato and sales are only in Italy)

- *Focus on “non-fashion” technical products:*

About ten years ago Lenzi Egisto Spa, a typical Prato company in its fifth generation of entrepreneurs, shifted its production to technical textiles. In few years the company was able to patent several products and processes. Today they have a strong market position in protective apparels and medical fabrics; in particular fabrics for hospitalization and for skin disease (psoriasis).

In 2010 Lenzi Egisto Spa turnover was 27 mln. € or a 23% increase on 22 mln. € in 2009, showing that it was not affected by the global crisis.

- *Integration with “ProntoModa” Chinese cluster.*

For a very long period from the beginning of the 90s the two parallel Prato clusters - traditional and Chinese – have led separate lives with very few contacts mainly limited to those local companies selling or renting premises to Chinese entrepreneurs. This was also due to the fact that the two clusters served different market segments: the Chinese selling very cheap Pronto Moda garments, the traditional Prato companies selling mainly high-end yarn, fabrics and garments. This has been changing lately and, although very few traditional Prato entrepreneurs would openly admit it, it seems that some of them have started supplying the Chinese cluster companies. Indeed the image of the Chinese-made products is of so low-quality and low-cost that, until now, any association with them was considered dangerous for a reputable company.

The start of transactions between the 2 clusters has also been facilitated by a concurrent development of different strategic options for individual enterprises within the Chinese cluster. Some of them are targeting higher market

segments or are trying to differentiate their business. In addition, increased supply problems for inputs sourced from China has affected also Chinese-owned companies in Prato and has made local suppliers more attractive – especially those in the middle-low range.

At present these transactions are very limited but they might turn out to be the early examples of a future collaboration between the two parallel clusters.

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#### 1.4.2 CLUSTER STRATEGIES

In addition to the strategies of individual firms, the main representative bodies of the cluster, that is Unione Industriale Prato and the local Chamber of Commerce, have addressed some critical common issues.

- *Lobbying for defending European T/C manufacturing.*

For several years, significant efforts have been exerted to lobby authorities at local, national and European level for a modification of the current general legal and normative framework. At European level the main issues put forth are:

- the request for reciprocity in the competitive conditions in the international market;
- a re-balance of the trade vs. industrial policy of the EU, which currently is considered as penalizing the whole EU manufacturing sector, and the T/C sector in particular.

At national and local levels, efforts have been particularly devoted to the defence of the Made in Italy label and to the struggle to stop illegal practices such as unregistered labour and tax evasion, counterfeiting, and all other elements of general unfair competition. The results of these lobbying activities are generally considered very disappointing. In several occasions during the roundtables organised for this study and during individual interviews, local SMEs entrepreneurs showed disagreement towards “Europe” for having promoted policies that were seen as favouring the destruction of EU-based manufacturing such as, for example, opening EU borders to imports without asking for reciprocity. An even higher level of disagreement was shown towards the national /local administration for not being capable to stop the spread of those illegal practices that distort competition.

- *Sustainability and Innovation*

At business level, Unione Industriale di Prato and Prato Chamber of Commerce launched three projects targeting sustainability and innovation:

- The acquisition of the EMAS certification for the whole Prato cluster. The EU Eco-Management and Audit Scheme (EMAS) is a management tool for companies and other organisations to evaluate, report and improve their environmental performance.
- The “Cardato rigenerato CO2 neutral”. **Cardato regenerated co2 neutral** is the world’s first certified ‘zero emissions’ textile product. It is made with recycled wool from the Prato District and has limited impact on the environment. Carbon emissions are calculated and then offset through the purchase of green credits.
- Prato-CREAF, a centre for research, innovation and advanced training in the district.

All these projects have some implications for innovation. However, as Mr. Roberto Lenzi – managing director of the Lenzi Group and vice chairman of the Unione Industriali di Prato – highlighted in an interview on technical and innovative textiles to the largest Italian newspaper “La Repubblica” on 14<sup>th</sup> February 2011 “The Prato cluster has

just kept on the sideline: *Technical textiles represent an area of interest because the carded technology is extremely flexible and adaptable in terms of materials and their combinations*".

- *The "convergence" of the two parallel clusters.*

The Chinese parallel Pronto Moda cluster represents a problematic issue in terms of very limited integration in the local T/C sector. At present few locals start to recognize some general positive effects of the Chinese "ProntoModa" cluster such as:

- Many old, un-used or over-sized industrial premises and some machinery were sold or rented by local Prato owners to local Chinese entrepreneurs. With those who continued to work in T/C used the proceeds to build new and modern industrial premises outside the previous congested areas.
- The presence of downstream productions in close proximity might represent an incentive for future co-operation as those few Prato textile producers who are already supplying the local Chinese companies have realised.
- Despite the low positioning and image as well as widespread illegal practices of the ProntoModa cluster, this development keeps Prato among the largest T/C centres of Europe and this makes it possible to maintain a complete value chain in the cluster, so that SMEs can locally source all needed skills, services and inputs.

Those who are supporting this strategy of convergence have promoted opening of a branch of the Wenzhu University in Prato, as well as the creation of an Italian-Chinese research centre for innovative textiles in Prato. It must be said that the latter project, promoted by the provincial and regional authorities, is strongly opposed by the majority of local entrepreneurs and by the Unione Industriale. Despite openings on both sides this strategy of convergence is still far from obtaining the support of most local companies; many still reckon that the convergence of the two clusters is still prevented by the widespread unwillingness of the large majority of Chinese firms to comply with the Italian/European legal framework in terms of tax, labour code, social responsibility and fair competition.

Figure 3 below synthesizes the various reactions/strategies described above and visualizes the multifaceted strategic options that have been detected; this variety stems from the large number and the ample differentiation of the players in the cluster. On one hand, this richness allows a sort of Darwinian selection process but, on the other hand, it may increase the internal degree of disorder making the Prato cluster similar to a dissipative structure: high entropy of the system with loss of energy and efficiency.

Figure 3: Prato Reactions and Strategies

## Reactions/Strategies



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### 1.4.3 BEST PRACTICES

As indicated above the unique features of Prato T/C industry make it difficult to select examples or good practices that could be transferred to other areas. At cluster level, the project for a Green cluster which has as objective the EMAS certification for a territory including enterprises of the T/C industry and enterprises of the leather manufacturing sector might be a good example of intra industry cooperation for sustainability.

At firm level, as previously indicated, strategies and practices are so differentiated and characteristic for each situation that we can only summarize examples which, so far, have been successful because they ensured the survival or, in the best cases, the development of individual firms. This study found that winners are those companies that focus on few, differentiating features:

- Reduced marketing dispersion, by selection of clients and designing specific delivery of product and services,
- Limited size of collections and limited design/style innovation so as to reduce costs without reducing quality,
- Concentration on direct management of key phases of production for quality control by bringing back into the company those phases that were previously delocalised for cost cutting reasons,
- Foster product and production technical innovation in particular for carded products leveraging high flexibility of carded technology,
- Development of a brand for specialized product (narrow product/market scope) and branded outlets in order to cover also the most profitable value chain segment.

### 1.5 SWOT AND LOCK-INS ANALYSIS

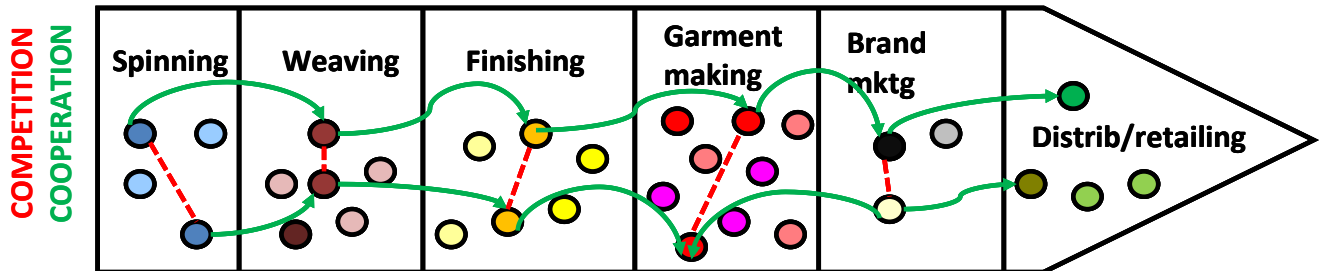
The downsizing of the cluster underway is threatening the traditional model of competitive cooperation within Prato highly-fragmented system of contractors-subcontractors. Firms' mortality and the consequent decrease in system players and production capacity make it difficult to rely upon local subcontracting; "the system" is disappearing and its traditional way of functioning (cooperation-competition) is breaking down. In order to survive, many enterprises widened their supply by integrating different production phases, thus diluting their hyper-specialization, to take advantage of any new business opportunity. This underlying restructuring - underlying because composed of many individual decisions hardly visible from the outside - generates a climate of all against all, as described by the local entrepreneur Faliero Sarti, and it is disrupting the cooperation model of the cluster. As a result, the traditionally very strong internal cluster's business linkages are weakening.

The following Figure 4 describes graphically the change under way.

Figure 4: Impact of the Decline on the Prato Cluster

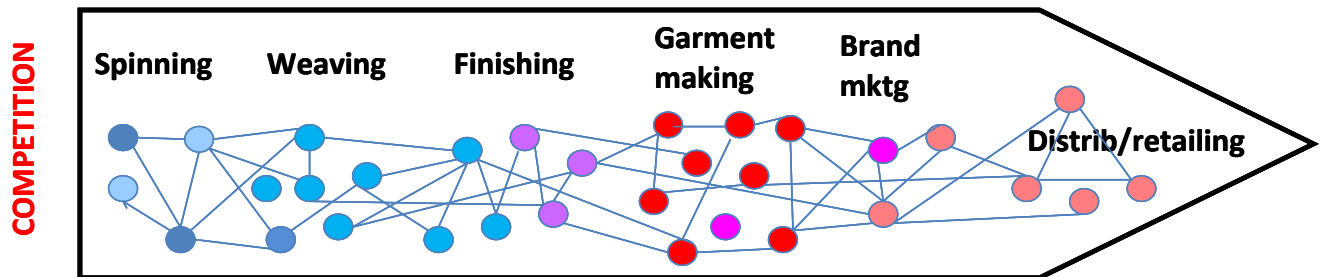
1. *Yesterday* (below value chain) the relationship of competitive cooperation found effective boundaries by the hyper-specialization within each segment of the chain, limiting the level of disorder and inefficiency;

Subcontracting system of “specialized” units:  
know how – capacity – flexibility – social distribution of work. Strong internal linkages.



2. *Today* those boundaries (below value chain) are weakening and allow each player to bring disorder to other areas of specialization. This generates entropy and lower overall efficiency.

Looking for orders: de-specialization, search of any opportunity,  
low prices, low margins... all against all, no cooperation, no mutual trust.  
. Weakening internal linkages.





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### 1.5.2 SWOT ANALYSIS<sup>5</sup>

At present the distinctive characteristics of the Prato cluster are:

- Traditional attitude for entrepreneurship,
- Widespread wealth in entrepreneurial families,
- Presence of the Chinese Pronto Moda Cluster.

#### **Strengths**

- High level of competencies, skills, and reputation as inputs supplier, especially yarns and fabrics, for the fashion market.
- Strong technical specialization,
- Widespread wealth that gives firms financial solidity for investments, innovation and development.
- The development of the Pronto Moda cluster because it contributes to maintain the role of Prato as one of the T/C European capitals; it turns idle assets and facilities into productive factors, and, last but not least, may become a systemic strength when business ties between the Prato Pronto Moda cluster and China mainland should fade.

#### **Weaknesses**

- Difficulties to conceive new visions and opportunities outside the fashion market,
- Excessive competition among SMEs of the cluster, leading to negative effects on margins and on the overall efficiency of the cluster,
- Increasing alternative portfolio allocations towards non-T/C business; wealth generated in the past in the T/C business is diverted to other purposes. It also diverts young entrepreneurship from the T/C business to other allocations, including non-productive rent.
- Aging population and aging entrepreneurs,
- Marked reduction of production capacities due to downsizing and restructuring,
- The Pronto Moda Chinese cluster is also widely perceived as a weakness for Prato for its negative impact on the cluster overall image as well as a driver for the diffusion of illegal practices.

#### **Opportunities/Threats**

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<sup>5</sup> Any specific feature of an SME or a cluster is not in itself a strength or a weakness; similarly, a change in the market (or in any external environment the enterprise refers to) may be either an opportunity or a threat. In the case of a cluster the same scenario might be a clear opportunity for some SMEs and a significant threat for others. So features should be related to a known objective, a strategy or to a general orientation in order to be labelled as strengths or weaknesses.. A similar consideration can be made for opportunities and threats. When China entered the WTO this was an opportunity for famous Western brands that could access new customers there, but it was a threat for European SMEs that found themselves less competitive in comparison to delocalization or outsourcing opportunities in China. Currently China is expanding its domestic market (also by increasing wages and salaries, therefore costs), this is an advantage for European subcontractors or SMEs (because they increase their relative competitiveness) but it can be considered a threat for international brands because Chinese domestic expansion will most likely generate large local brands (a phenomenon which is already underway) that will be able to compete domestically and possibly in the global market within few years. Clearly, the same scenario is bringing both opportunities and threats. Firms which are able to innovate are those that see opportunities where all others, consultants included, see threats.

Currently, the financial crisis lingering over Europe and America generates high uncertainty and its development may have a massive impact on Prato cluster at economic as well as social level.

**Opportunities:**

- Re-orientation of fashion towards products where Prato has a traditional competitive hedge, that is; woollen, knitted, coloured and innovative products (short term),
- Lower pressure from China both in terms of prices and quantities (medium term),
- European consumers orientation is moving towards higher quality standards in particular for safety and sustainability (short to medium and long term),
- Developments of technical and functional textiles for possible new applications of the carded technology,

**Threats**

- Continuous shrinking of aggregate demand in Western markets,
- Financial turbulence leading to consumers' uncertainty, credit crunch, increased volatility,
- Increasing competition from Turkey in the wool segment,
- Unfair competition from illegal and uncontrolled imports,
- Lack of reciprocity in international markets leading to lack of opportunities in export markets.

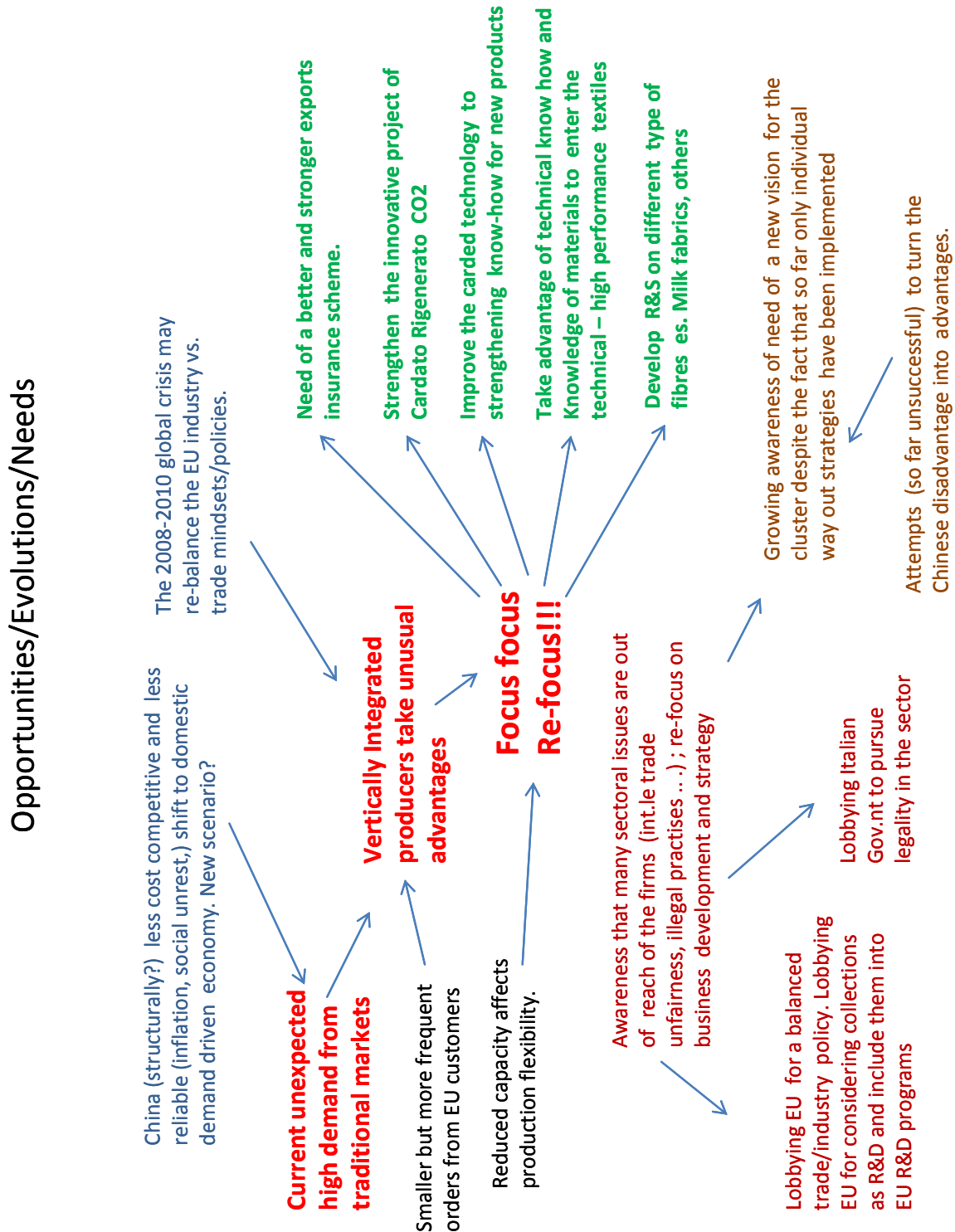
2010 and beginning of 2011, after several disappointing years in terms of demand and prices, show a positive market trend for wool and woollen products; this recent development has cyclical and structural causes. In the short term, this growth is the outcome of new fashion trends which favour wool and knitted products; in the long term it may be depending on a global re-balancing of consumption areas since large emerging economies started to support their domestic demand. Therefore we may be at the beginning of a new global cycle and, so far, Prato seems to have been able to take advantage of it. At present local SMEs register a surge in orders and full capacity utilisation. Should these positive trends be confirmed, the most immediate threats for the Prato cluster as indicated by the Italian wool trade association (see Annual Report - 11 April 2011) are:

- Scarcity of raw materials. Prato manufacturers face strong competition from Asian buyers in purchasing not only raw wool but also rags for regeneration.
- Current production capacity of Prato is too limited in all the segments of the chain to be able to fulfil an additional increase of demand for Prato products.
- Insufficient credit for export guarantees, since the increase in raw materials prices and the surge in orders has made existing plafond totally inadequate.

*As the Chairman of the Association states: "... European and American customers are returning to Italy both for collections and, sometimes for ProntoModa. When this trend should reinforce, Prato will find itself unprepared to respond since today production capacity is merely half of that of 15 years ago."*

Figure 5 below summarises the various issues regarding opportunities, possible evolution and related needs.

Figure 5: Prato Opportunities/Evolutions/Needs





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### 1.5.3 LOCK-INS ANALYSIS

If sustained the current demand recovery, pushed by cyclical and structural trends, can help to foster transformation of the cluster which is not yet visible at cluster level but it is in progress in a significant number of companies. However, various lock ins may represent important obstacles and prevent it.

Cognitive lock-ins are a persisting weak ability of many entrepreneurs to react to the scenario emerged in the mid 90s. Many SMEs entrepreneurs are still focusing on the fashion system and do not take into consideration different uses of textile products such as technical applications, high performing products, etc. It should be underlined that the extreme specialisation of some companies did not prevent them from trying out new products (linen yarns, garments, etc). So cognitive lock ins do not seem so strongly rooted.

Functional lock-ins in the Prato area refer mainly to the highly specialised machinery and equipment used for carded yarns and fabrics. Since the carded technology is highly flexible functional lock-ins are not likely. The growing presence of a parallel, semi-illegal Chinese ProntoModa cluster and the reciprocal no-relation policy has blocked the institutional evolution of the cluster. Though the road is still a long one to go, both sides have started at least to consider a possible “co-habitation” by increased economic transactions among Prato suppliers and Chinese customers.

## 1.5 CONCLUSIONS AND SUGGESTIONS FOR PUBLIC SUPPORT INITIATIVES

According to the results of interviews and roundtables with local SMEs and cluster’s operators the following areas are those most in need of change and public initiatives:

### **At European level**

Prato has a long and successful industrial and entrepreneurial tradition and entrepreneurs are used to take care of and build-up their own businesses. Their demands, listed herebelow, for public support are mainly related to the establishment of a level playing field in the competitive arena:

- Reciprocity in international trade; local entrepreneurs find it un-acceptable that Chinese products can be freely imported in the EU while their own products have to pay 17% custom duty when exported to China. The same applies to non-tariff barriers. A well known example exemplifies the problem faced by companies trying to export to China: a batch of fabrics imported from China by a local entrepreneur was subsequently re-exported to China because the company did not need it anymore, but was rejected by Chinese Customs because it was classified as sub-standard.
- Labelling indicating origin of textile and clothing products should be compulsory so that consumers can make an informed decision when buying apparel products.
- Reciprocity in state aid regulations: many non-EU competitors have access to State Aid while EU regulations prevent this kind of support to EU companies. The most quoted example quoted by local entrepreneurs are export bonuses for T/C companies in Turkey.

### **At national level**

- improved enforcement of all legal requirements for companies: unregistered workers, tax evasions, lack of health and safety procedures, polluting practices give undue competitive advantages to companies that operate illegally.
- Current credit insurance schemes for SMEs should be upgraded since with current increase in raw materials prices the insurable plafond has become insufficient.
- Liberalization of the energy market and the resulting competition among suppliers did not lead to a real decrease of energy costs. Currently energy cost is still 30% higher than in other major European countries. There is a need for intervention by the Authority on Energy so to increase competitive conditions in energy supplies.

### 2.1 NORTHERN GREECE

For a long time the area around Thessaloniki, Greece has been an important textile and clothing region in the European landscape. Its historically relevant position is mainly due to two key factors:

- The availability of local cotton, grown in the surrounding regions of Macedonia, Thessalia and Central Greece for a total acreage of about 300.000 hectares (2011).
- The logistic position of Thessaloniki which remains an important crossroads between the Balkans and the Mediterranean/Middle East countries.

These favourable conditions allowed companies in the region to take full advantage of the expansion of the textile and clothing business during the 70s and the 80s. In that period, companies strengthened significantly their position and became mostly exporters to the European markets. The T/C region around Thessaloniki evolved towards a mature and articulated industrial cluster consisting of an integrated textile chain - cotton specialized - which stretched from raw materials to the final products including: fibre production (ginned cotton), spinning mills (yarns), weavers (fabrics), dyers, finishers, and clothing manufacturers as well as a significant endowment of horizontal services provided by public institutions and private initiatives.

In the early 1990s Thessaloniki was the most important T/C centre in South East Europe, having a lead even on Istanbul which was competing with Thessaloniki in terms of advanced services and activities, know-how and marketing for the sector. The local T/C industry reached its peak at the beginning of the 1990s with approx. 150.000 employees and 15.000 registered companies.

The prevailing business model was export oriented mainly to Germany and other European countries, with large clients either retailers or product brands.

From then onwards the T/C industry in the region underwent a constant transformation under the combined influences of mounting competition from low-cost producer countries and the new investment opportunities offered by the collapse of communist regimes in neighbouring countries.

Greek entrepreneurs, especially small and medium clothing manufacturers, were quick to delocalize labour intensive productions in Bulgaria (while the war in Yugoslavia was under way) where low-cost labour textile and clothing plants were readily available. This process was particularly noticeable in Southern Bulgaria where Greek entrepreneurs and managers could easily commute from Thessaloniki, Naoussa and other T/C centres. Within few years a sort of T/C specialised area with a strong presence of Greek entrepreneurs developed between the border and the region South of Sofia. Initially, Greek garment producers continued to use Greek-made fabrics for the delocalized clothing units, with a tendency, over time, to replace them at least partially with imports from Turkey or sourced locally.

The delocalization process was necessary to maintain cost competitiveness especially after the signing of the EU-Turkey Customs Union in 1995. At that time a number of EU programmes were funded to support the Greek T/C sector and many T/C companies invested in a major upgrading of technology with some of them also trying to develop their own brands.

Delocalization boosted competitiveness, thanks to the low costs afforded by low wages in the clothing sector in Bulgaria, and exports to the mainly EU markets continued to grow reaching a peak of 2,5 billion euro in 2003. From that time onward the T/C sector in the region started to decline.

Major declining factors have been:

- The competitiveness of China and other Asian low cost countries which exerted a strong cost pressure. Interviewed Greek entrepreneurs say that such pressure was further reinforced by lack of reciprocity in the competitive rules, especially after 2005. The growing importance of Turkey as a T/C powerhouse and of Istanbul as one of the new capitals of the T/C industry.
- The increasing dis-integration of the local cotton chain. First, Greek cotton growers received incentives to increase production, but no requirements on maintaining quality standards were applied. Raw and ginned cotton was traded on the spot commodity market instead of supplying the local cotton textile chain directly. Second, strong competition of everybody against everybody reduced margins for all, and pushed companies to find customers “anyway and anyhow” therefore weakening the internal links of the cluster.
- Also ties with Bulgarian T/C sector weakened, due to a slow increase in labour costs as Bulgaria moved closer to EU membership (delayed from January 2005 to January 2007). Following the end of the war in former Yugoslavia some companies moved to lower-costs Macedonia while others moved from own production to outsourcing.
- Domestically, the Thessaloniki export oriented area suffered the growing competition of Athens-based (Attiki) T/C companies. Companies such as Attrattivo and BSB - all based in Athens – targeting the domestic market, obtained significant success by focusing on the development of their own brand and domestic retail chains. This moved the centre of the Greek T/C from Thessaloniki to Athens where currently the international fashion fair is held.
- Increasing market competitive pressures, lower margins, and decline of leadership caused a continuous loss of attractiveness for the T/C sector in the Thessaloniki area leading a significant number of SMEs entrepreneurs to reallocate their assets in other businesses such as real estate, photovoltaic, tourism and finance.

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### 2.1.1 ANALYSIS OF THE CURRENT SITUATION AND MAIN PROBLEMS

Despite being weakened, Thessaloniki still remains a major centre of the T/C Greek industry. According to the Hellenic Fashion Industry Association (SEPEE), Northern Greece represents more than 50% of total Greek employment and more than 80% of national export of the Greek T/C industry.



Table 4: Northern Greece T/C sector

	2008			2009		
	Textiles	Clothing	T & C	Textiles	Clothing	T & C
Number of companies (Greece)	1.276	2.818	4.094	1.153	2.377	3.530
Number of companies (Northern Greece)	392	1.437	1.829	366	1.215	1.581
Share of Northern Greece	31%	51%	45%	32%	51%	45%
Number of employees (Greece)	22.900	42.965	65.865	20.930	36.640	57.570
Number of employees (Northern Greece)	12.139	21.912	34.051	11.302	19.091	30.393
Share of Northern Greece	53%	51%	52%	54%	52%	53%
Exports (mil €)	763	784	1.547	749	639	1.388
Share of Northern Greece	77%	89%	83%	78%	90%	84%

Source: SEPEE

Main export markets, as % of total exports, in 2009 are: Germany 25% , Cyprus 14% and Italy and France 7% each.

Enterprises are still present in all the segments of the T/C chain from cotton crops to the final products with a significant component in the capital intensive operations of spinning, weaving and finishing and in advanced services such as design, CAD/CAM, marketing. Starting from the 2<sup>nd</sup> quarter of 2011 almost all SMEs interviewed reported a surge in orders that is filling capacities in all segments of the textile chain. Also spinners who, during the last 3 years, have worked an average of only 2/3 days a week are presently working 7 days a week trying to meet all orders received. This surge in demand is still far from being consolidated and it has left companies wondering on its possible duration.

#### **Main problems of T/C in Northern Greece.**

Here below the findings of the interviews and the round table held with SMEs entrepreneurs and experts of the region. They can roughly be divided as follows:

- Institutional level: problems arising from the general legislative framework, and affecting all manufacturing sectors, over which entrepreneurs have no means of direct intervention, except lobbying policy makers at national and/or European level.
- Industry/regional level: problems encompassing the T/C industry at regional level on which entrepreneurs can have an impact if and when they adopt common decisions or share same business behaviour (individual choices which foster an aggregate).
- Business Level: problems related to individual SMEs and their business.

### **Institutional level**

- Lack of reciprocity in the competition in international markets. There is an asymmetry in the compliance with rules between European and non-European companies in the EU market. For example, in Greece there is no state aid for export guarantee schemes and other export support measures as in Turkey (export bonus) or other Non-EU countries.
- Public procurement in EU is not always open to bidders from all member states and different rules apply.
- Difficult access to credit for T/C SMEs. For years the textile and clothing sector in the region has been discriminated against by banks in credit allocation because considered as a low-growth and low-potential industry. Access to credit remains the first problem especially at this time when price of raw materials is very high and due to the Greek financial crisis Greek companies are asked to pay cash in advance for purchases.
- Widespread delays in receiving payments are putting pressure on liquidity of SMEs, but taxes and VAT must still be paid on time, resulting in additionally asymmetry.
- Cost of energy was not affected by the recent liberalization of the energy market. Especially for energy intensive producers such as dyers and finishers, cost of energy is very high.
- Excessive bureaucracy in everyday activities but also for participation in support schemes. Applications for EU or nationally funded projects require skills that are not common in T/C SMEs, such as writing and presentation. In addition, even when applications are successful, the whole process from application to approval to implementation takes too much time that when funds are made available the project may have become obsolete.

### **Industry/regional level**

- Low image of the T/C industry, because considered as one of the “mature and low technology sectors” as well as due to the low wages paid, which hinder the attraction of financial, entrepreneurial and skilled resources in comparison to other sectors.
- The dis-integration of cotton growing from the manufacturing cotton chain in the area destroyed a potential advantage for the textile and clothing companies in Northern Greece.

### **Business Level**

- The vast majority of SMEs cannot develop an alternative business model beyond the usual one based on low-costs, un-branded, not-innovative products - neither in terms of technology nor materials or design - focused on exports. It is a model which functions on a low-cost strategy and therefore easily threatened by companies in low-cost, emerging economies and/or by the emancipation of sub-contractors.

### **Impact of the Greek financial crisis**

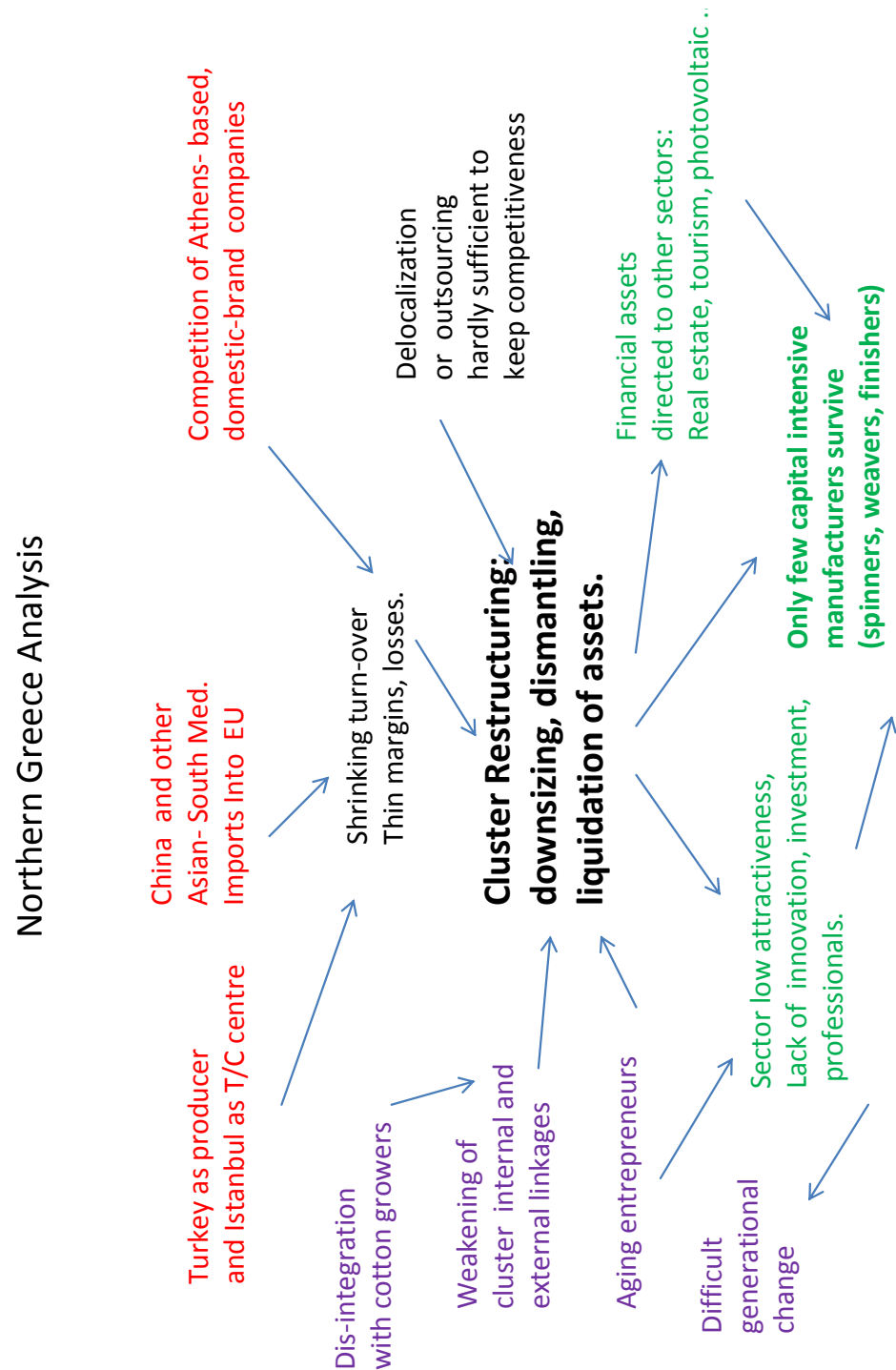
The financial crisis is exerting significant impact on the cluster. Initially (2008-2009) the effects were similar to those suffered by most other European companies: decrease of international demand, stronger price competition, further growth of grey areas in the business environment with unregistered workers and tax evasion. Because of its export orientation the Northern Greece cluster suffered significantly from the drop of demand in Europe; and negative effects were transferred also to South West Bulgaria with disinvestments of owned production facilities and increased outsourcing contracts with local Bulgarian companies.

Starting from early 2010, the financial crisis turned from global to Greek, putting additional stress on the local economy. Currently long term loans are almost non existent for local T/C SMEs as short term finance for working capital needs. According to information gathered at the round table held in Thessaloniki with 23 SMEs entrepreneurs and 4 sector experts, companies are now required to pay cash, in advance, for purchasing raw materials and other inputs such as fabrics and yarns from foreign suppliers. In the last year cotton prices have increased sharply, an increase which is difficult to transfer to the consumer because of depressed demand in Europe.

The hard hitting credit crunch inevitably limits competitiveness which is also threatened by the mounting pressure of other low-cost countries in the Balkans such as Albania, FYROM and Serbia. Serbia in particular, is currently attracting new direct investments from large European companies like Benetton. Such an unstable situation generates worries about the future of the whole Greek economy and leads financial assets towards foreign allocation, rather than investments at home.

Figure 6 below visualizes the causes that brought to the severe downsizing and restructuring of the Northern Greece T/C cluster and the effects that the restructuring is producing. *Causes* are placed above “Cluster Restructuring” which is in the centre of the graphic while *effects* are at the bottom.

Figure 6: Northern Greece Analysis



This representation is useful to highlight the functioning of the T/C Northern Greece cluster as a competing “system within systems”. In particular, it highlights that Northern Greece is squeezed between the mighty Turkish system, the Athens fashion system and, like all other European T/C clusters, it has to face global competition especially from China. Delocalization in Southern Bulgaria may have save the balance sheet of enterprises but, concurrently, it

emptied production facilities and other assets, including shared assets as infrastructures and cluster service centres, of the Thessaloniki region.

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### 2.1.2 DEVELOPMENT OF THE CLUSTER AND SMES SUPPORTING SERVICES

Despite the difficulties currently experienced, this region is still equipped with several T/C institutions and sectoral service providers that indicate the level of articulation of the cluster.

The **Hellenic Fashion Industry Association (SEPEE)** is the main representative of the apparel and textile industry in Greece, founded in 1973 as a non - profit organization with headquarters in Thessaloniki, and with a branch office in Athens. Today its active members are approximately 300 Greek clothing and textile companies, including all major companies of the sector. It is a member of Euratex (European Apparel & Textile Association) and provides a number of services to its member companies, from trade support such as organization of trade fairs and trade missions in Greece and abroad, development of integrated marketing plans, establishment of technical and training centres such as:

- Endysi is a training centre for the apparel and textiles companies ([www.endysi.gr](http://www.endysi.gr)) offering customized training, and surveys of local labour force market in the sector.
- The Greek Somatometric Institute ([www.bodymetrics.gr](http://www.bodymetrics.gr)).
- The Technology & Design Centre S.A. ELKEDE ([www.elkede.gr](http://www.elkede.gr)).

**Clotefi** (Clothing textile and fibre technological development s.a.) <http://www.etakei.gr/> was established in 1986 and falls under the supervision of the Ministry of Development. It provides a range of services such as:

- product quality control testing,
- trouble-shooting and solving special technical problems,
- applied research,
- designing and implementing research projects,
- the application of resource management and administration systems,
- human resource training.

The cluster is enriched by privately owned software houses, (Polytropon and Computer Life are the most reputed ones) that provide up-to-date T/C software applications (CAD/CAM, 3D modelling, etc.) in Greece and abroad. Until 2007 an international fashion fair was held in Thessaloniki (Moda Salonica) now replaced by Femmina held in Athens.

All these service providers are still active although they have experienced a decrease in their level of activity coherent with the downsizing of the sector.

The overall pillar of the education system in Thessaloniki is the **Aristotiles University**, the largest in Greece with 80.000 students, which covers the development of fundamental skills both in business administration and in textile technical matters. It has, among other relevant courses of study, an Agricultural Biotechnology Institute which is well reputed and could be instrumental in improving the supply of high quality cotton.

High level training is also provided by the **Technological Educational Institute of Thessaloniki** which is a higher education institution, offering a variety of undergraduate and postgraduate degrees. Established in 1983 is organised in 24 Departments. The Department of clothing design and technology was started in 2001. It offers a 4-year course for a university degree. The curricula were developed taking advantage of a project funded by the EU Equal programme with the aim to match needs of local T/C industry. As a result the Institute offers 3 courses of study: marketing, production technology, design. No updating of curricula was done after the initial consultation. At present it has approx 200 students, mostly in the design course, which may represent an oversupply compared to local requirement.

### 2.1.3 REACTIONS AND STRATEGIES

Reactions and strategies of T/C SMEs are analysed in their different long term and short term horizons.

#### **Long term/structural strategies.**

Ever increasing difficulties brought numerous entrepreneurs to abandon the T/C sector altogether; those who resisted generally tried to minimize their capital investment. Especially in the clothing manufacturing segments this meant divesting from production facilities in Northern Greece or abroad and turn to outsourcing. This preference for outsourcing contracts brought enterprises to diversify their suppliers in neighbouring countries. The Table below shows the current presence of Greek companies, as owners or in outsourcing, in South-East Europe and Turkey.

**Table 5: Greek Clothing companies in South-East Europe, 2010**

Number of companies	320-350
Number of employees	30.000
Type of cooperation	outsourcing 50% Greek ownership 50%
<i>Countries</i>	
Bulgaria	57%
FYROM	20%
Albania	10%
Turkey	7%
Romania	4%
Other	2%
% of Greek clothing production produced in South East Europe	80%

*Source: estimates by SEPEE*

Delocalization outside Northern Greece, subsequently partly substituted by outsourcing and combined with declining overall competitiveness, led to a general downsizing of the industry and a concurrent structural modification of the T/C region. Today, most local companies operating in the clothing segment are registered as

service providers such as designers, specialized sub-contractors, trading agencies, logistics etc., clearly indicating that the manufacturing capacity has been substantially reduced in the Northern Greek area. There remains still functioning a significant number of small garment making workshops operating as subcontractors.

At the beginning of the last decade SMEs looking for alternatives to the export-oriented business model tried to implement strategies to develop own-brand lines in order to increase the value added of products but without success, despite the public funding available under a programme promoting business clusters in the region. According to the companies interviewed the main cause of these failures was the collapse in prices registered in 2005.

Positive examples at firm level are few and tend to be found more frequently in the spinning and finishing segments. Although greatly diminished in numbers, some of the surviving spinners, dyeing and finishing companies took the risk of investing in innovative, specialized technologies in order to produce high-value products. This succeeded thanks to strong collaboration with Academia and R/D centres.

### Short term strategies

The most common answer to the T/C decline and the 2008-2010 crisis was to resist and try to survive by downsizing and restructuring. In general, companies continued to exploit as much as possible their key competitive factors: goodwill by European buyers and ability in sub-contracting and outsourcing. The emerging business model emphasizes light structures, promptness and flexibility.

Furthermore, the Greek financial crisis is draining resources from the manufacturing sector. Uncertainty is dominating resource portfolio allocation; there is a strong preference for liquidity and risk adverse activities. In other words, the crisis is boosting tactics and short term actions instead of medium or long term strategy.

## 2.2 SOUTH-WESTERN BULGARIA

The T/C industry has a particular weight in Bulgaria: in 2010 it employed more than 113.000 people, representing almost 20% of industrial employment, and its export share was 12.6% of total Bulgarian export in 2009. After a long period of growth the Bulgarian Textile/Clothing industry started to be hit by the crisis at the end of 2007. According to BAPIOT (Bulgaria Association of Apparel and Textile Producers and Exporters) the production index declined by 13,2% in 2008 and by 32,3% in 2009. The turnover of the Bulgarian T/C decreased by 13,6% in 2008 and by an additional 28,9% in 2009.

The specialized areas for textile and clothing in Bulgaria are those centred around Ruse, Sliven and Blagoevgrad, with the latter approximately covering the South-Western Bulgarian area bordering with Northern Greece. Latest available data show that in this area there are approximately 1670 firms, of which 1500 are clothing producers. There are a few modern, large producers, many of whom are owned by foreign companies while 88% of all companies have less than 50 employees.

Table 6: T/C sector in South-West Bulgaria by n. of employees - 2008

	Total	Micro (less than 9 )	Small (10 - 49)	Medium (50 - 249)	Large (250+)

<b>Manufacturing of textile, other textile products, without apparel</b>	<b>170</b>	<b>121</b>	<b>31</b>	<b>15</b>	<b>3</b>
Preparation and spinning of textile fibers	10	6	..	..	..
Manufacture of textiles	16	8	..	4	..
Finishing of yarns, fabrics and clothing	9	5	4		
Manufacture of made-up textile articles, except apparel	50	32	13	4	..
Manufacture of carpets and textile floor coverings	..	..			
Manufacture of cordage, rope, twine and related products	6	5	..		
Production of non-wovens products, except apparel	5	4	..		
Manufacture of other textiles for technical and industrial needs	7	7			
Manufacture of other textiles, non mentioned in other paragr.	66	53	8	5	
<b>Manufacture of apparel</b>	<b>1500</b>	<b>901</b>	<b>404</b>	<b>178</b>	<b>17</b>
Production of processed soft garment leather	8	5	3		
Manufacture of workwear	70	33	31	6	
Manufacture of outerwear without workwear	452	256	120	67	9
Production of underwear	505	288	132	79	6
Manufacture of other wearing apparel and clothing accessories	385	280	87	17	..
Manufacture of articles of fur	4	3	..		
Production of socks and tights	23	5	16	..	..
Prod. of machine,hand-knitted sweaters, cardigans and similar articles	53	31	14	8	
<b>Total</b>	<b>1670</b>	<b>1022</b>	<b>435</b>	<b>193</b>	<b>20</b>
<b>% over total companies</b>		<b>61</b>	<b>26</b>	<b>12</b>	<b>1</b>

Source: Bulgarian Institute of Statistics

The South Western Bulgarian T/C industry, as in the country as a whole, is mostly composed of micro and small companies, whose business model is based on Cut Make Trim (CM-T) or Cut Make (CM) contracts with foreign buyers. The majority export over 90% of their production and are extremely dependent on a limited number of customers who provide fabrics and all trimmings. This means that local companies sell their sewing services and have very few levers at their disposal to develop strategy and markets. Most of the time the one and only variable is cost, and above all, labour cost.

Greek businesses were among the first wave of investors in Bulgaria after the end of communism. Greek Foreign Direct Investments (FDI) were first over the period 1996-2003 (pre-accession), and third over the period 1996-2008 (including accession). Greek clothing companies, mainly from the export-oriented region of Northern Greece were among the first companies investing in Bulgaria. In 2010 Greece was the third export destination for T/C (after Italy and Germany) and the 2<sup>nd</sup> origin of T/C imports after Italy.

## 2.2.1 ANALYSIS OF THE CURRENT SITUATION AND MAIN PROBLEMS

The prevailing CMT business model confines local T/C SMEs to exclusively price-based competition, the resulting low margins (prices being close to the marginal costs) prevent capital accumulation and the generation of resources necessary for the development of the more articulated business models. Other factors affect their ability to develop their competitiveness, of which some fall under their own responsibility, while others are beyond their influence. The following list is the result of the roundtables with T/C SMEs and textile experts held in Sofia and Blagoevgrad (May-June 2011).



- Inadequate business management skills.

Since margins in CMT contracts are low, mistakes in setting prices and controlling costs can have a very negative effect on companies' profitability and, ultimately, on their ability to survive. When negotiating prices with buyers there are still too many cases when company managers set prices that do not ensure replacement of machinery and equipment. In practice too often SMEs negotiate and accept prices that are lower than actual total costs. SMEs net margins in CMT contracts are usually so small that no room remains for capital accumulation and a subsequent strengthening of firms. Inadequate management skills are a widespread weakness for the T/C SMEs of the region.

- Labour market and skills.

The T/C sector is a labour intensive sector with a high concentration of women employment, and according to local experts' estimates in the Blagoevgrad area about 85% of total labour force in T/C is made up by women. There is a general shortage of workers, especially young workers with the required skills. The region has a lower than national average un-employment rate and the T/C suffers from a poor image as a low-wage industry, with widespread seasonal work, that does not offer possibility of career and personal development. Such shortages lead some companies to organise bussing of workers from the outlying areas.

As for relevant skills, technical training in vocational schools is limited to CMT in clothing and knitting. The three years course of the Technical College of Blagoevgrad is considered inadequate by all companies. Large T/C companies, such as Pirin-Rollman, started their own in-house training programmes to overcome the shortage of skilled workers and technicians, but this solution is obviously beyond the means of individual SMEs.

- Labour code

Bulgaria Labour Code is more than 30 years old, amended several times, and it allows a large degree of flexibility, both for seasonality of work as well as for adapting to fluctuations in orders and production levels. In 2009 to help companies cope with the sudden fall in orders the Government introduced the possibility for companies to negotiate with the workers and their Unions a reduced working week that allowed them the needed flexibility to weather the difficult times. Notwithstanding this great flexibility according to local entrepreneurs the Bulgarian labour Code has the following shortcomings:

- Due to automatic salary increases, linked to length of stay in a job, it does not promote nor reward productivity.
- Taxes and social contributions on labour are too high compared with similar, neighbouring economies (especially in the Western Balkans).
- Especially local SMEs are convinced that the Government is off-loading onto companies some of the social obligations that should be covered by public services/bodies such as paid leave for caring for a sick child.
- Weak representation of employers and insufficient lobbying power.

The fragmentation of employers' representation is also a problem, because it hinders the lobbying capacity of the sector and a common orientation of the employers for a better business environment. As a result although the T/C industry represents almost 20% of industry employment and is one of the largest export earners in Bulgaria it does not feature in the Government Development Plan and no stimulus or incentives schemes are planned.

- Grey areas of the T/C business.

There are varying estimates concerning the grey economy, and according to local experts interviewed it may represent up to 30% of legal business in the T/C. sector. As a whole the grey economy including illegal trade and unfair business practices (tax evasion, unregistered employment, under-invoicing, smuggling) are considered as one of the major internal problems of the local textile industry. In fact the resulting distortion of the market prevents a fair competition; it lowers prices and puts unjust burdens on the competitiveness of companies that operate in a legal way. Good entrepreneurs, good technologies, good workers all lose out when confronted by illegal practices and behaviours.

- Access to Credit

According to local SMEs it is very difficult for many small producers to obtain loans for buying machinery. Credit lines are in principle available, but interest rates are high (over 7% with peaks of 15%) and the level of collateral required is also high. The latter however represent no significant difference with the past. In addition it is difficult to obtain credit for working capital needs because banks do not understand the specific short-term credit needs of T/C producers. Also SMEs credit schemes funded by international donors fall short of expectations. According to a widespread opinion of SMEs, when applying for funds there seems to be a prejudice against the T/C compared to other sectors that are considered as high-growth and ensuring higher returns.

- Public Support Policies

According to owner/managers interviewed applications for European funds and projects are quite time consuming and require skills that are not available within SMEs, such as writing and presentation skills. In addition, even when applications are successful, the whole process from application to approval to implementation takes so much time that when funds are made available they are often too late to be really effective. The energy market was recently liberalised but in practice only large companies can take advantage of prices that may be 25% lower than average, because prices depend on the grid level and only large companies can afford the required transformers.

- Market Reciprocity.

SMEs operating in Bulgaria are subject to numerous regulations relating to, for example, social and environmental sustainability, but which do not apply to competitors from outside the European Union. Insufficient Customs control in EU countries allows continuous infringement and violation of the law to which European companies are subjected and lead to a growing in-balance between controls and limitations applied to locally produced products compared with imported ones. According to companies interviewed EU regulations are very restrictive and prescriptive on EU producers while, at the same time, allow the entry into the European market of products without any sort of social or environmental content.

This list of problems notwithstanding, since the beginning of 2011 a number of new buyers have appeared and local companies were offered new contracts. Almost all the SMEs interviewed stated to be operating at full capacity. These buyers seem to be returning back from China and other distant countries. The terms they are offering are not very profitable, and, should this trend be confirmed, only those SMEs that will be capable of great efficiency and of keeping costs under control will be able to benefit from them.

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## 2.2.2 DEVELOPMENT OF THE CLUSTER AND SMES SUPPORTING SERVICES

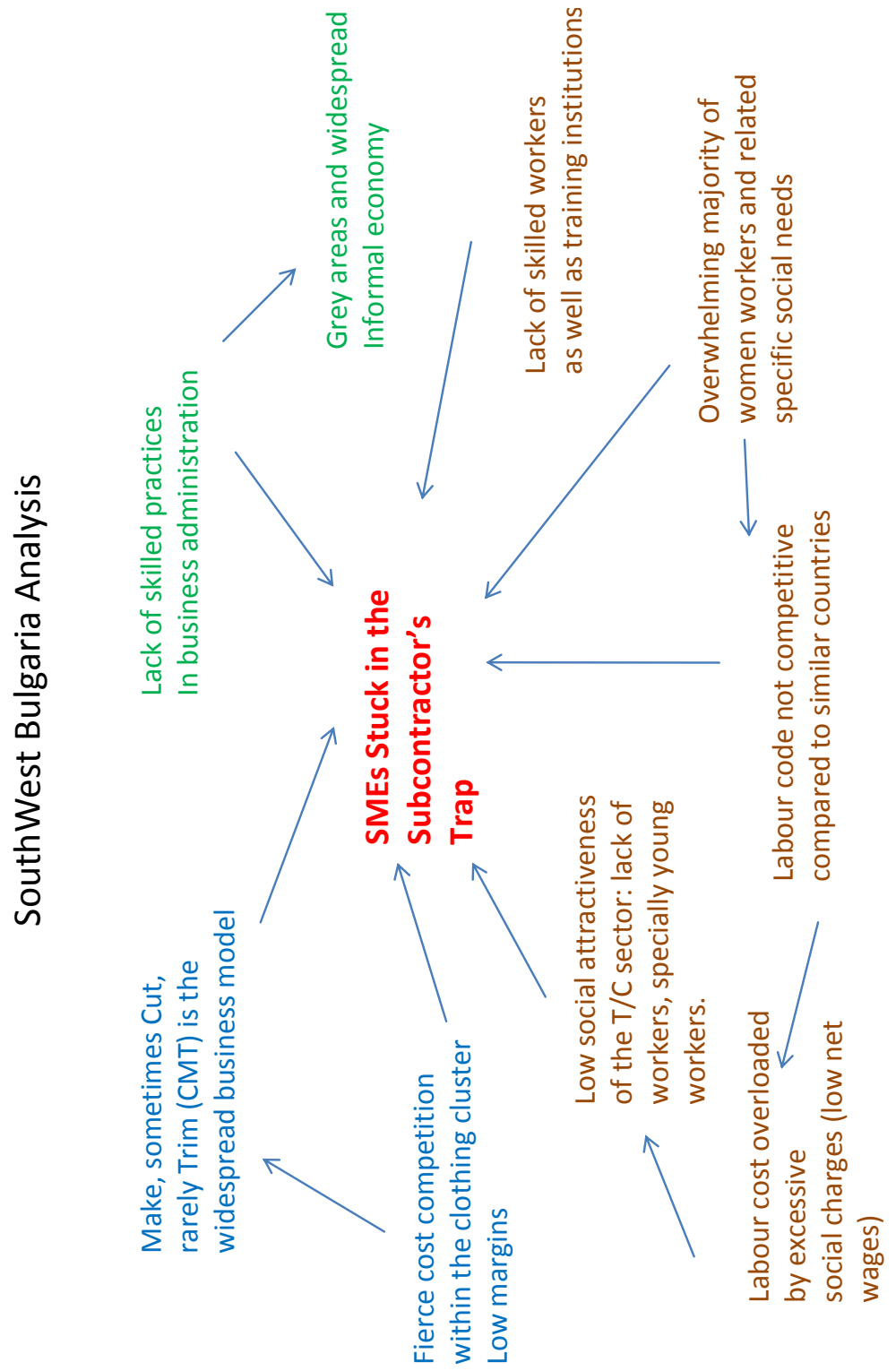
In South-Western Bulgaria there are very few of those structures that are typical of clusters and that can provide services to SMEs. In terms of representation BOTO (Textile and Clothes Branch Organisation of Southwest Bulgaria)

has 45 members in the area. The national T/C association of BAPIOT has several members in the area but does not have a local branch.

The Technical College of Blagoevgrad, part of the South-West University, offers a 3-year course in Textile Technology with yearly enrolment of approximately 20 students. There are no testing laboratories or certification bodies in South-West Bulgaria due to insufficient demand; since most companies work in CM-T contracts, tests and certifications are generally taken care by the contractors. There has been one attempt to set up a cluster structure in the area with the objective of purchasing CAD-CAM technology for local companies but apparently the structure stopped functioning after the end of the project that funded it.

Figure 7 below clearly shows that the South Bulgarian T/C cluster is stuck in the subcontractor's trap because of the many internal and external causes that have an influence on the cluster. Indeed this means that the Southern Bulgarian Cluster is, as a cluster, depending directly or indirectly on others' decisions. In other words it depends on customers who, in turn, are themselves depending on others, in particular Greek companies who are suppliers of European brands.

Figure 7: South West Bulgaria Analysis



Labour flexibility has been the real response to the 2008-2010 crisis in South Western Bulgaria. Considering that labour is the key factor for CMT companies, it is not surprising that the vast majority of companies, large and small, acted on it. However this response is the aggregate outcome of many individual moves (negotiations between employers and employees), and not the result of a different general framework or legislation. Therefore in South West Bulgaria the shrinking of demand did not trigger an extensive industry restructuring characterised by closures, dismantling of activities, liquidation of assets, and massive lay-offs, but a reduction of wages, reduction of working hours and, less frequently, higher productivity in terms of cost per product unit. At the same time also margins were reduced, spreading the pain between labour and entrepreneurs. The region increased its overall resilience and as of today, production capacity has not been heavily affected.

In few cases the loss of CMT orders from established buyers caused by the crisis led SMEs to search for new local or foreign customers in an attempt to diversify markets and decrease dependency on few buyers. In some other cases the search for alternative markets and buyers led companies to invest in marketing and market search. But resources, including management skills, remain limited and it seems unlikely that many South West Bulgarian SMEs will be able to change their business model in the near future.

A recent example concerns a company that signed a CMT contract where, differently from those of the previous 10 years, they had to source the trimmings component. This has put them in great difficulty because after so many years of only doing sewing services they have neither the contacts nor the sourcing skills nor the finance to autonomously provide trimmings.

## 2.3 ANALYSIS OF NORTHERNGREECE/SOUTH WEST BULGARIA AS A SINGLE REGION

Linkages between the two regions are still significant though they seem to be gradually transforming into outsourcing relations. The Thessaloniki centred T/C industry seems to have lost the competition with Istanbul as the main textile clothing centre in the South-East Europe. Within Greece, much will depend on how the Greek crisis will unfold and its effects on local demand and credit. So far the Greek crisis has hit the Athens (Attiki)-based T/C industry that target local consumers, the hardest. The textile clothing industry in the Thessaloniki area maintains a leading role in Greek exports.

In South West Bulgaria most SMEs seem to be confined in the subcontractor's trap which prevents them a capital accumulation and, consequently, a more developed business model. Their international competitiveness in the CMT segment has weathered the crisis but is under pressure: internally, due to the inefficiencies and shortcomings of the general business environment with time consuming bureaucracy, demanding regulations, social and environmental burdens and, externally, by mounting competition from neighbouring non-EU countries that can still rely on lower labour costs.

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### 2.3.1 SWOT AND LOCK-INS ANALYSIS

A process of new re-localization seems to be currently under way in Europe at the expense of Asian suppliers. China is witnessing an escalation of social unrest with a growing number of strikes and labour grievances which undermine the reliability of timely deliveries and quality; China is also rebalancing the pattern of its economic

development by allowing an expansion of domestic demand. This is likely to generate an increase of wages and salaries and, possibly, an upward trend of costs should labour productivity not increase at the same pace.

Additionally, low demand in Europe in 2009-2010 pushed large buyers to shrink their average order as well as to increase their frequency. This change rewards quick response and flexibility; two features which are impossible to obtain from too distant Chinese and Asian suppliers. Indeed, as previously indicated almost all interviewed SMEs both in Northern Greece and in South West Bulgaria say that they are “full of orders” and new customers are showing up. This phenomenon, which has been registered with identical features also in the wool cluster of Prato, combined with social and political unrest in South Mediterranean countries (in particular in Egypt and Tunisia which are significant players in the T/C market), may represent an opportunity for the South-East European area, including Turkey.

However, even if this positive trend will consolidate, the possible obstacles are numerous. The financial crisis in Greece, the shortage of labour combined with the still limited entrepreneurial skills in South West Bulgaria, the presence of powerful competitors, both long established as Turkey as well as the emerging Balkan countries as Serbia, Croatia, Albania and Macedonia may make the two regions fail to take advantage of these new opportunities.

#### SWOT Analysis: NORTHERN GREECE

##### Strengths

- Widespread entrepreneurship,
- Goodwill in large European markets such as Germany, Italy, Great Britain,
- Technical competencies along the chain, from cotton fibre to finishing and final manufacturing,
- Possibility of delocalization for low-cost manufacturing within commuting distance from Northern Greece in Bulgaria, FYROM and Albania,

##### Weaknesses

- Low attitude of cluster SMEs to act as an integrated system; “interrupted” value chain from cotton growers to the final phases,
- Aging entrepreneurs and aging workers,
- Widespread reliance on sales agents in Europe.

##### Opportunities

- Lower pressure from China both in terms of prices and quantities (medium term); concurrent refocus of European large buyers in neighbouring areas which can offer a relatively low total cost and logistic advantages
- Growing preference of European consumer towards guaranteed or certificated goods for safety and sustainability (certification) of the materials (cotton fields)

##### Threats

- Proximity of strong competitors from Turkey and other low-cost surrounding countries such as Serbia, Bulgaria that are attractive destinations for investors,
- Shrinking of aggregate demand in Western markets
- Financial problems of the Greek state, leading to additional taxes and other burdens, and very high degree of uncertainty,
- Unfair competition of illegal imports from low-cost countries,
- Increased costs of raw materials and energy.

## SWOT Analysis: SOUTHERN BULGARIA

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Still a significant manufacturing base, the T/C sector remains one of the most important in the country's economy</li> <li>• Presence of well managed companies that are a clear and meaningful example of "best practice" to follow</li> <li>• Possibility of flexibility in the utilization of workforce even within a general labour framework if negotiated case by case.</li> </ul>	<ul style="list-style-type: none"> <li>• Overwhelming presence of basic CM-T SMEs (Basic skills)</li> <li>• Lack of good administration, cost control and management</li> <li>• Lack of skilled and willing workers and low attractiveness of the T/C sector</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Reduced competitive pressure from China and Northern Africa T/C producers which reopens some space in the market.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous shrinking of aggregate demand in Western markets</li> <li>• Proximity of strong competitors in surrounding countries such as Serbia, Bulgaria that are attractive destinations for investors and buyers,</li> <li>• Financial problems particularly in nearby Greece with which South Western Bulgaria has many linkages</li> <li>• Widespread adoption of illegal practices as the only possible answer to cost competitiveness in the short term.</li> </ul>

## LOCK- INS analysis

In the last ten years the T/C industry in Northern Greece has struggled to stem the decline and despite the downsizing and restructuring the region still has entrepreneurship, business orientation and the traditional commercial attitude. At the same time South Western Bulgarian SMEs have survived in the CM-T business by re-organizing their workforce but, except some exceptions, they failed in the attempt to reposition their business model.

Signs of possible re-adjustments in the international T/C market with a less aggressive China may increase market opportunities for both regions. The Northern Greece SMEs may be able to provide the entrepreneurial skills needed to exploit new business opportunities while industrious South Bulgarian SMEs may provide manufacturing capacity. However, this possible re-launch cannot replicate the old cluster model of the 1990s: Northern Greece is facing a strong competitor in nearby Turkey; South Bulgaria has to compete with other Balkan countries.

In the traditional clothing sector equipment is not specific neither expensive; in South Western Bulgaria and, to a lesser extent, in Northern Greece, manufacturing capacity is still available. However in South Western Bulgaria SMEs are unable to update their production facilities with modern, specialized equipment for cutting and/or trimming. In Northern Greece the prevailing attitude of the entrepreneurs and the current economic situation

prevent new investments until the Greek financial situation stabilises. Significant improvements and modernization are unlikely in the near future and this may be an obstacle for the competitiveness of the two combined regions.

Northern Greece entrepreneurs are fully aware of the situation in their traditional business; however they seem to be reluctant to take into consideration alternative business models. Delocalization and outsourcing strategies substantially decreased the workforce and today a large share of those employed are professionals such as designers, marketing experts, logistics consultants. This reduces the risks of lock-ins. In South West Bulgaria entrepreneurial and management skills are essential for an overall improvement of SMEs in the T/C sector and their limited availability represents a serious obstacle for development.

Northern Greece is still well organized as a T/C region. The industrial association SEPEE has a wide representation base and performs a strong lobbying function for the needs and interests of local enterprises. The current financial crisis in the country has the effect of postponing decisions. "Wait and see" seems to be the logic behaviour to adopt. In Bulgaria as a whole and in the region analysed industry representation is fragmented leading to reduced lobbying power and a low level of representation of the interests of companies in the this sector.

## 2.4 CONCLUSIONS AND SUGGESTIONS FOR PUBLIC SUPPORT INITIATIVES

A general improvement of the T/C industry in Northern Greece will be possible only if local companies will be able to give new impulse to their entrepreneurial role in the European market by offering innovative, customised (specialised material uses and performance) and fashion solutions to international buyers in the cotton chain. A re-focus on the integrated cotton chain including cotton growers would help to increase linkages and retain and increase added value along the whole value chain. To this end bio-technology projects should be promoted. Improvement of the quality of cotton fibre from raw cotton growing for special local productions could generate a chain of excellence from fibre to yarn, from fabrics to collections.

Regulatory interventions are also needed so that SMEs can really take advantage of the liberalised energy market and obtain those lower prices that at present are not available. The current Greek financial crisis is affecting the way T/C SMEs operate since they cannot find credit to finance their long term modernisation plans nor their working capital needs. At present T/C SMEs are asked to pay cash in advance for their purchases of inputs. There is need for public support in providing credit to companies if they are to contribute to the re-launch of the Greek economy

The competitive advantage of South West Bulgarian T/C is based on its production capacity and skills. However until the industry attractiveness remains low there will not be enough available human resources to sustain a growth strategy of the local industry. Indeed it is not enough to create new training centres or strengthen existing educational institutions if there are no applicants.

A renewed attractiveness of the T/C industry will be made possible only by an increase in salary levels that need to be compatible with a country that is an established member of the EU. Increase in salaries is influenced by value added creation and by fiscal and social government policies. Value added is created by increasing average prices of products, but prices have been kept constantly under pressure by trade liberalization policies that made possible imports in EU of very low priced products and of even lower quality and social ethic content.



Policy interventions that make possible for EU consumers to identify level of quality and ethical contents of products (as covered by existing EU legislation that EU-based SMEs entrepreneurs are requested to comply with) may enable prices to reflect the technical and social conditions that are considered part of the European space. The increase in average prices might reduce market volume but it will certainly increase quality for consumers and workers alike: and in Europe they are the same persons.

This long term Europe-wide policy should be accompanied at local level by interventions supporting skills upgrading of workers in SMEs. Large companies are organising in-house induction training for newly recruited staff as well as regular updating for current workers. Since no single SMEs can afford to design and run its own skills development programme independently public institutions offering this type of services are needed. The need for skills development programmes is not confined to workers and technicians but should cover also T/C managers and entrepreneurs.

The benefits of the liberalisation of the energy market in Bulgaria are limited to large companies. SMEs, who cannot afford their own transformers, are cut off from lower prices since they depend on grid level. There is need for changes in the regulatory framework to offer companies of all sizes the same opportunities.

The fragmentation of representation of the T/C sector in Bulgaria, over 90% made up of SMEs, is an element of weakness of the industry. It is necessary to support development of representation as well as other forms of aggregation of SMEs such as specific-purpose consortia (e.g. export consortia, purchasing groups), and clusters that enable SMEs to reach critical mass.

### 3.1 BACKGROUND

Following the end of the communist regime and the birth of Slovakia as an independent republic in 1993, the Slovak T/C industry was among the first sectors to express vitality and capability to restructure by creating new companies, rehabilitating old ones and attracting foreign investments.

The T/C industry could rely on technical skills and fixed assets especially in the two main textile areas of the country: the area of Trenčín in the West of the country and the area of Presov in the East. Trenčín had developed a textiles presence since the time of the Hapsburg Empire with a strong presence in the production of high-quality wool fabrics, mainly for men garments, as well as in the production of women garments. Conversely the area around Presov had its main development after WW2 with large investments especially in the production of menswear and ladies-wear for the Soviet Union market.

In 2000 the Slovak T/C sector represented 5,5% of Slovak GDP and employed approx. 57.000 people equal to almost 15% of total industrial employment. The T/C sector maintained this performance in absolute terms until 2003 (57.000 employed) although the share of total GDP continued to decline (2.17%) because other sectors, especially mechanical and metallurgical, registered very high growth rates.

### 3.2 ANALYSIS OF CURRENT SITUATION AND MAIN PROBLEMS

Starting from 2004 a downward trend sets in, with a strong acceleration in the last period 2008-2010. The last available statistics refer to the year 2008 and indicate employment in the sector at 26.000 people (10.000 in textiles and 16.000 in garment making) and the T/C sector representing a share of less than 1% to GDP. 2008 statistics of the two T/C regions of Slovakia indicate that the sector was already marginal in the Trenčín area (with approx. 2% of regional GDP) which tried instead to attract investments in the electronic, robotic and other high technology machinery: to sustain this development strategy a Technical University was established in 1997. Currently Trenčín maintains a slight textile characterization only due to the presence of technical textiles production (and the region has only one star by the Cluster Observatory method).

Although today strongly reduced the T/C in the Presov region (East Slovakia) is not marginal. A study by the Cluster Observatory published in April 2011 "Star Cluster in Slovakia" [http://www.clusterobservatory.eu/common/galleries/downloads/Star\\_clusters\\_Slovakia.pdf](http://www.clusterobservatory.eu/common/galleries/downloads/Star_clusters_Slovakia.pdf) based on 2008 data, still indicates apparel as one of the main specialisation in East Slovakia with 8.000 employed representing almost 18% of regional industrial employment.

The effects of the 2008-2010 financial crisis worsened the existing structural weaknesses of the sector and, according to estimates by leading T/C entrepreneurs in Presov, today total T/C employment is approximately 5.000 in the whole region, and 9.000/10.000 in the whole of Slovakia. These are still rough estimates but since official data are non-existent, they give an idea of the magnitude of the losses experienced by the T/C industry. According

to the T/C companies interviewed there are several causes of this decline in Slovakia in general and in the Presov region in particular, of which some are due to the general economic environment and some have a political origin.

- The development strategy of successive Slovak governments that promoted mechanical and metallurgical sectors in general and aimed at attracting foreign investments in the automotive industry in particular, while considering the T/C industry as marginal. During the last years share of the automotive industry in the Slovak economy has kept growing following the arrival of big world players such as Volkswagen (Bratislava), Peugeot/Citroen, Hyundai and Kia in Zilina.
- As of today government policy favouring large investments has generated a favourable economic trend for Slovakia with national GDP registering higher growth rates than the average EU and NMS GDP rates, but in practice, it has dried up resources for labour intensive sectors such as T/C and SMEs.
- The adoption of the euro on 1<sup>st</sup> January 2009 at the exchange rate of 30,125 SKK/€. Since the average exchange rate SKK/euro had hovered around 33 SKK/Euro during the preceding year (around 41 SKK/Euro in 2004), the actual exchange rate represented a significant appreciation of the Slovak currency in a rather short time frame that affected the competitiveness of Slovak exports in general and of the Slovak T/C industry in particular.
- The accession of Slovakia to the European Union in 2004 was soon followed in January 2005 by the expiry of the Multifiber Agreement which allowed countries to place quotas on the amount of textile and clothing imports allowed. As pointed out by some entrepreneurs the opening of the EU market to un-restrained international trade was not accompanied by a corresponding opening of markets in some countries that retained tariffs as well as non-tariffs barriers.

In addition to these general framework factors there are sector-specific factors especially relevant for the Presov region:

- Limited development of entrepreneurship (SMEs) has constrained the quantitative generation of strategic options and business models. Also those T/C SMEs that, as in many other parts of Europe, played a role of flexible production support as sub-contractors, rarely developed towards more articulated business models that made possible to improve skills and competencies needed during the restructuring of the T/C sector. Today estimates by local operators put at 300 the number of sewing workshops compared with approx. 500 just few years ago. These workshops seem to be mainly confined to play a buffer role during peak production periods.
- As indicated above East Slovakia may be classified as a T/C specialised region but lacks the network of interconnections needed to be an industrial cluster according to Porter's definition.
- Lack of a strong, local entrepreneurship. Almost all important T/C companies are owned by foreign companies or have strong foreign partners that provide strategies and management systems. Successful local entrepreneurs are few in this sector.
- The logistic situation is inadequate; the Zilina-Bratislava highway is not yet completed and the Kosice airport lacks important services such as transport to surrounding area. The prevailing presence of foreign investors in the main companies leads them to develop mostly linkages outside the region rather than cooperation within the cluster and developed transport infrastructure is essential.
- Last, the proximity of Ukraine on one side made it possible for some Slovak companies trying to contain costs to delocalise operations within a commuter's range. On the other side Ukraine as a competitive location may further deplete the entrepreneurial fabrics of the Presov region which has not yet reached a

mature stage in the T/C sector. It must be pointed out that local managers indicate that Ukraine remains to this day a very complex location for any business venture.

The industrial and cultural marginalisation of the T/C has had negative effects on the image of this industry that, except for the best companies, finds it difficult to attract skilled labour and finance; two strategic resources for its development. This low attractiveness has objective and subjective causes. Competition from imported products has kept prices under pressure. In trying to survive companies have lowered prices and, consequently, value added. As a result also salaries suffered; the average T/C wage of 350€/month is not attractive for skilled workers even considering a local unemployment rate far higher than the national one. Especially young people prefer to work in service sectors such as hotels and restaurants or to leave and go and work abroad.

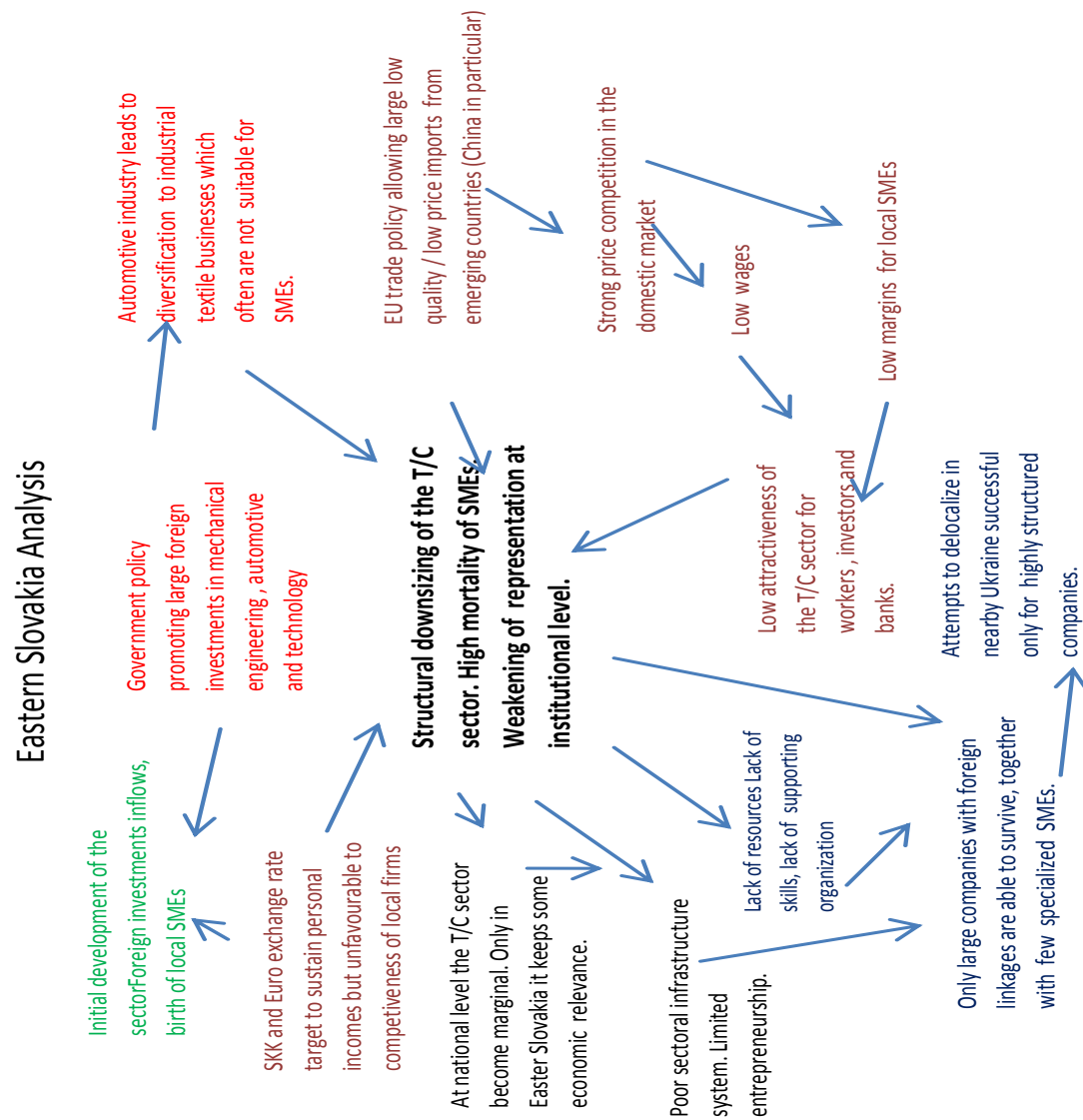
According to the local SMEs Agency (<http://www.rpicpo.sk/>), part of Enterprise Europe Network, contacts and requests for information from T/C SMEs are very rare as well as their participation to projects financed by EU structural funds. Only 3% of loans disbursed under a micro finance facility for SMEs (up to 59 employees) that cannot get funding from the banking sector went to T/C SMEs. This facility provides loans up to 50.000 € at 3% interest rates for a 4-year period.

According to some SMEs entrepreneurs interviewed these facilities tend to be used for the wrong purposes with entrepreneurs and, non-entrepreneurs as well, submitting projects prepared to meet funding requirements and objectives, but irrelevant for the objectives of the company, be they long or short term. Other entrepreneurs stated that the funds available under dedicated SMEs support projects suffer from the same bias and prejudices of the banking sector against the T/C industry which is considered low-technology and low-growth and consequently not worth funding.

Local T/C SMES have paid a heavy price to the crisis; in most cases they could offer only undifferentiated labour services, and their inability to propose alternatives to the prevailing business model of the local textiles chain, made them easy targets to the fall in demand on one side and competition of low-cost products on the other. Although some T/C companies have positively reacted to the crisis, for the last few years the T/C industry in the Presov region is experiencing an accelerated decline.

Figure 8 below highlights the causes that triggered the consolidation of the sector in the area, combined with high mortality of SMEs and the concurrent delocalization of some units in nearby Ukraine.

Figure 8: Eastern Slovakia Analysis



### 3.3 DEVELOPMENT OF THE CLUSTER AND SMES SUPPORTING SERVICES

The marked decline of the T/C sector in the whole country and in the Presov region has also resulted in the absence of bodies/associations representing the interests of the industry. ATOP, the Slovak Association of Textile and Clothing Industry closed down in 2009 and also at local level there are no representative bodies, nor dedicated secondary or higher education courses.

The only research centre of the region is Vúchv, research institute for man-made fibres, located in Svit. It is a national centre for basic and applied research in man-made fibres and nonwovens, and allied technologies, machinery and equipment. At national level the Vúch-Chemitex centre in Žilina is a private technical specialized facility dealing with:

- R&d in textile materials with a wide range of applications including technical textiles and textiles for special applications,
- R&d in the field of textile finishing and surface treatments of textile and non-textile materials, research and development of machines and equipment for textile technologies, textile finishes, testing and sewage treatment plants,
- Testing and certification of personal protective clothing, and the Oeko-Tex® certification. Local SMEs however do not use these services because working almost completely under CM-T or CM contracts they rely on foreign partners/contractors for all required certifications and testing.

### 3.4 REACTIONS AND STRATEGIES

The findings of field research in Presov indicate that companies that overcame the crisis and are today present in the market with positive prospects of development are those with the following characteristics:

- with foreign owners or partners,
- with niche specialisations that make possible some form of defence of positions.

It should be added that entrepreneurial skills, such as the ability to take risks, strategic vision and a passion for the job and one's company, have proved all fundamental ingredients needed to design and implement the right strategies in the current business environment. The presence of a foreign partner/investor is important because it provides strategic vision, management methods and skills, and ensures sales in the international market. This is certainly a key factor for companies such as Ozex/Egotex (partner of Corneliani), Mueller Textiles (technical textiles) and Gemtex (underwear), L.C. Management (orthopaedic mattresses and home textiles), Gemor (protective garments and uniforms).

Specialisation is certainly important for local SMEs, and well developed entrepreneurship is the key factor that tends to be accompanied by a very personalised and often warm relation with staff and workers. In some cases the presence of the 2<sup>nd</sup> generation in the management of the company gives a longer time perspective to its operations.

LC Manager was founded in 1999 by an Italian entrepreneur, it has 80 employees and produces high-end orthopaedic mattresses and bedding exported in many EU countries. Since its start the company has steadily grown

and every year has posted positive results notwithstanding the crisis. Its success factors are: continuous technical innovation of its products, of which many are protected by own patents, covering very specific needs, and very personalised labour relations with ad-hoc arrangements, such as payments of above-average salaries on a weekly rather than monthly basis. This seems to have reduced almost to zero the level of absenteeism in the company.

The presence of 2nd generation in the management of the company and good labour relations are important factors also for the second example. ATAK company, with approx. 50 employees, is a sportswear specialised producer and retailer. It operates in a sector dominated by big International brand names such as Adidas, Nike, Reebok and Kappa as well as low-cost imports from China and Pakistan. It has resisted and survived combining different factors;

- a specific technical skill in printing (the original specialisation of the entrepreneur),
- efficient, low cost production, also thanks to the employment of disadvantaged workers under incentive schemes,
- Retail sales through 2 owned shops and local sales of foreign brand sportswear and equipment.

This product/sales mix can function and be successful if all activities are managed and controlled with a strong entrepreneurial drive. In this case 4 members of the entrepreneur family work in the company.

The local company that better combines different success factors is Gemor Fashion. It has:

- a European partner ( Morsman B.V., Netherlands) that helps in developing a strategic vision based on international contacts and market opportunities in Europe, as well as advanced management methods, greatly facilitated by the adoption of CAD-CAM technology,
- a network of partners/contacts in foreign countries that enables it to participate in public procurement contracts,
- a delocalised production plant in Ukraine (since 2007) that enables the company to significantly save on unit labour costs compared to production in Slovakia; from 16,5 to 6 cent €/minute. Production in Ukraine involves additional costs for transport and logistics as well as technical and quality control, thus reducing the low-cost advantage and adding to the need for highly developed management planning and control. In addition Ukraine remains a highly unstable and at times dangerous environment: unstable due to unclear legal framework and dangerous due to organised crime. So only a company that can find a reliable local partner and is skilled at taking calculated risks can be successful. Also local Ukrainian working conditions and skills base are less developed than in Slovakia.
- Specialisation and certification in production of protective garments and other special garments such as uniforms for the army, police, etc. Gemor fashion is the only firm in Slovakia licensed by the German Gore firm to make Gore-Tex waterproof fabrics.

At present Gemor Fashion provides direct employment to 100 workers plus approximately 200 through subcontractors in Slovakia and 500 workers in Ukraine (in the year 2000, Gemor Fashion employed 250 people in Slovakia and additionally worked with approximately 700 people through local subcontractors). It should be highlighted that subcontractors tend to play a subsidiary role and are utilised only when the production capacity in the Ukraine and in the Presov plants is saturated. The characteristics indicated above, direct production + subcontractors are not so common in the local industry.

The company Ozex is not an SME company according to the employment criteria but it can provide some insight on what is needed to succeed. It is partner in Egotex, a Slovak-Italian joint venture with a majority Italian partner

holding 60% of shares. It started in 1998 with the objective to combine fashion and technology. It is located in Presov employing 350 workers and producing 500 high-end men suits/day all sold under the Italian brand name Corneliani. The joint venture is highly successful and it recently renewed a trade agreement with Corneliani for a period of 10+10 years, a long term commitment quite rare in these highly unstable times.

Separately, in 2002 Ozex has delocalised its own production facilities in Ukraine, where it currently operates with 600 workers, and keeps 70 workers in the Presov facilities. Ozex was among the first pioneering Slovak companies moving production to Ukraine where there are still very difficult and dangerous conditions. The Ozex company does 50% of the work on a CM (cut and make only) basis, 30% as CMT (cut make and trim) and 20% as full confection with own financing. Products are cut in Presov, sewn in Ukraine and finished in Presov. Fabrics are sourced in Italy and financed thanks mainly to a 60-day credit term that helps the company to bridge the 90-day period of the production cycle. The remaining credit needs are covered by local banks that have always been more than willing to finance Ozex even at low interest rates (4% on short term loans). The company has no problem in finding workers that are then trained in-house, in short induction courses (max. 6 month) and the average age of employees is quite young at approx 35.

According to the Ozex owner/manager the system of public subsidies is wrong because they are generally manipulated so they end up being used by the well-connected and not by the most deserving companies.

There also examples of only partially successful companies that are interesting because they demonstrate that strategies only based on cost advantages without any additional specialisation are less likely to succeed than those based on specialisation. The development of the automotive industry in Slovakia has offered new opportunities for technical and industrial textiles: many companies especially in other Slovak regions have moved to this type of production and also some local entrepreneurs have invested in this type of products. Help s.r.o., founded in 1995, started operations as a garment company with 6 employees and in a short time it grew up to 100 workers producing for international brands such as Versace, Kenzo, Orsay and others, as well as its own collection. In 2005, following a period of growing difficulty in remaining cost competitive, it moved part of its production facilities in Ukraine where it employed approx 100 workers. Concurrently in 2005 the entrepreneur bought an SME company in Bohemia specialised in the production of non-woven textiles for high-level brands of the automotive sector and which is still operating successfully.

The two garment plants were eventually closed, in 2009 the plant in Presov and in 2010 in Ukraine, and the proceeds from their liquidation, rather than being invested in the technical textiles company in Bohemia, were invested in a totally different sector; real estate and wellness. This indicates that alternative asset allocation is favoured also compared to high-growth and high-innovation segments of the textiles industry.

At a general level most companies, when asked what they needed most to support their company long term objective, expressed the request that Europe should protect itself from “bad quality” products (imported or not imported) by imposing strict standards and ensuring enforcement.

### 3.5 SWOT AND LOCK-INS ANALYSIS

The deep transformation caused by a series of major events such as the end of the textiles quota system, the adoption of the Euro, the global financial and economic crisis has had a strong influence on the life of most T/C SMEs in the Presov region. These SMEs had the strongest lock-ins. At functional level installed machinery were



mostly sewing machines for medium-low quality garments; at SMEs level there were no opportunities for production specialisation or improvement of the textiles chain. At cognitive level most SMEs, not supported by the services of specialized industrial centres and not part of a cluster system that exchanges information intensely among its members, have not been capable to anticipate change nor to develop adequate answers. This does not seem to be the case of large companies. At institutional level the absence of independent, representative bodies of T/C SMEs both at national and regional level is preventing the possibility to exert influence in policy making that affect the industry and/or the regional development. It is also a serious obstacle to the development of service providers in the region.

## **SWOT ANALYSIS**

### **Strengths**

- The presence of large, internationally connected T/C companies in the region.

### **Weaknesses**

- Insufficient entrepreneurial resources, including lack of industrial representation (association)
- The significant downside in SME sector
- The inability of the sector to attract new human resources
- Lack of training and skills development resources

### **Opportunities**

- The widespread adoption of advanced technologies in the country.
- The proximity of Ukraine as a low-cost manufacturing base.

### **Threats**

- The loss of critical mass of the T/C sector in the region with consequent loss of importance for local and national authorities.

## **3.6 CONCLUSIONS AND SUGGESTIONS FOR PUBLIC SUPPORT INITIATIVES**

It is clearly difficult to propose measures for SMEs support in a T/C region where SMEs have been marginalized. The current lack of entrepreneurship, also at individual or family level represents a limit for policy measures intended to sustain local T/C SMEs.

Nevertheless existing, successful large companies, that can pay higher than sector average salaries, and employ highly skilled people in quality control, IT, logistics may represent a credible means for the improvement of the social image of the T/C industry. In Presov they lead the T/C sector and, in search for customization and differentiation for their foreign clients/partners, these local champions have developed a more articulated organization of production based on a network of subcontractors and/or suppliers of specific services. This could provide the needed flexibility and help the development of “clusters” of SMEs around them and could also reverse the trend of delocalisation of production facilities in low-cost neighbouring Ukraine.

This would be a new approach for breeding and strengthening start-ups. Instead of public-funded incubators, public funding for large companies and service centres might turn them into the driving forces that reshape the T/C sector with the goal of recovering competitiveness in an industry which still characterizes the region.

Concurrently, the issue of “attractiveness” of the sector must be addressed. As long as wages in the T/C sector remain significantly below the industry average, its attractiveness cannot be increased. Various measures can be tried either to increase net wages (lowering social charges on wages in the sector) or to link them to productivity. The supply of skilled workers remains an important obstacle to the development of SMEs. While plans for a dedicated University degree course have been shelved, at least for the foreseeable future, there is need for shorter courses that can train and re-train regularly workforce. Most of those currently employed in the T/C industry acquired their skills under the old educational and vocational systems of Czechoslovakia.

In addition there is need for improved SMEs access to credit and financial schemes that can lower the level of collaterals required. Only very successful T/C companies are given credit by banks because the T/C industry is classified as low-growth and low potential. As described above also dedicated SMEs credit schemes do not seem to reach T/C SMEs. Applications for these funds require skills not easily found in SMEs, and they tend to make funds available according to some general priorities and not according to the actual needs of companies. This frequently leads to applications for projects prepared to meet funding requirements rather than the strategy objectives of the company. There is a need for more targeted credit lines that can cover the actual, short or long term funding needs of SMEs.

T/C SMEs need to be supported in their search for foreign buyers in order to decrease dependency from few clients and to be exposed to new market opportunities. To this end support for participation to trade fairs and trade missions abroad is needed.

Following the liberalisation of the energy market in Slovakia it is now possible for large companies with large energy consumption to negotiate reduced prices of energy. This is clearly beyond the reach of single SMEs whose low energy consumption does not make them interesting clients for energy suppliers. There is a strong need for some form of aggregation among SMEs such as buying consortia that can negotiate and obtain advantageous rates on behalf of a group of SMEs.

### 4.1 BACKGROUND AND CHARACTERIZATION

The adjacent regions of Northern France (in fact the region Nord-Pas-de-Calais consisting of this named department) and Vlaanderen are often considered as one industrial system or textile district. Both were equal in size in 2000 with an employment of 30.000 people in each region. In 2010 textile employment in Northern France was down to 13000 jobs, while Flanders maintained some 24000 jobs.

In order to define the regions a further restriction is needed from the Belgian side. In fact the arrondissements of Comines-Mouscron and Ath in Hainaut; Oudenaarde in Oost Vlaanderen and of Ieper, Roeselare, Tielt and Kortrijk in West-Vlaanderen are connected to Northern France. However the city of Gent, although no longer hosting a textile industry since 2008, is an important research centre for the textile industry. The region defined as such shall be called Flanders, although this covers a different geographical district.

In France the industry in Picardie (some 3000 jobs) is part of the same regional logic. Moreover the textile industry in Normandie, Champagne and part of Ile de France also consider Lille as their rallying point. In this Task we only consider the municipalities in the Aisne department bordering Caudry. In Task 2 Research and Development we shall examine a slightly larger zone, including the above mentioned regions.

The connections between Flanders and Northern France were and are visible in three aspects. To a limited extend the presence of cross border companies or cross border family/capital connections. This is most the case between the Lille-Roubaix-Tourcoing agglomeration and Mouscron. To a limited extend the industry is complementary, with interconnections in supply chains. However due to differing specializations, the commercial connections have become less intensive over the last ten years. In fact the large presence of technical textiles and carpets does also create synergies between Flanders and the textile regions in the Netherlands and Nordrhein-Westphalen.

To a larger extend both regions are connected through external agglomeration effects most notably a common labour market, suppliers and institutions. The interaction in the labour market is an interesting one. Till the 1980s there was a positive migration balance for Northern France. Daily commuting also went mainly into France. However in the last two decades the flux inverted and nowadays some 4000-5000 workers commute from Northern France into Flanders. Much politicized is the story that more French workers commute to the Flemish textile industry than French speaking Belgian workers. This is mainly due to the larger presence of workers with textile skills and experience in France.

The **Northern French** textile and clothing industry represents in 2010 around 600 companies with an employment of around 13000 people. The region is the third cluster within the French system after Paris (fashion) and Rhone-Alpes (textiles). Since the demise of the larger textile groups (VEV-Prouvost, Chargeurs) the region's industry is essentially made up of SMEs. Moreover while the region was dominated by the wool industry in the agglomeration of Roubaix-Tourcoing, complemented with an important cotton industry in Lille and a linen industry (dealt with specifically in the Task 2 Case description) in the Lys valley. The wool industry has disappeared entirely in the period 1995-2003 mainly because of the crisis in the French menswear sector, a low export performance, a lower market

position than the Italian competition. The French wool textile sector had a lower degree of vertical integration and in general an outdated and inefficient plant because of decades of underinvestment.

There is a limited cotton and linen industry left. The cotton industry is mainly oriented towards the home textile sector (bed and bath-linen). The large clothing industry still present in 2000 has all but disappeared. Less than 20 subcontractors can be identified. However the LRT metropole hosts the headquarters of major retailers in fashion (e.g. Pimkie, ) or in sports (Decathlon) or in mail-order (Trois Suisses, La Redoute). Nowadays two industrial segments pertain: a technical textiles cluster in the agglomeration of LRT and a lace and embroidery sector in Calais and Caudry. The two lace districts are made of 15 firms with 1200 jobs.

#### **Nord-Pas-de-Calais Characteristics:**

- **Main Product Group: (1) Technical textiles (2) Home textiles (3) Lace and embroidery**
- **Main Markets: France except for Lace, World + Russia**
- **Distribution: Industrial markets, Luxury brands for lace**
- **No specific focus on stage of processing, much subcontracting and quasi integration**
- **Mainly medium size SMEs. Predominantly Manager-Ownership**

In **Flanders** the industry entails in 2010 around 250 companies with an employment of around 24.000 people. The geographical cluster selected represents some 70% of Belgian textile industry and some 40% of clothing industry. In Flanders the industry was traditionally dominated by family owned SMEs. The Flemish textile industry is dominated by two segments: technical textiles and home textiles. Clothing textiles is restrained to less than 10 companies. The clothing industry is made up largely of SMEs, many of them with manufacturing units in Northern Africa. However due to concentration in the carpet industry and some internationalization, large companies do now pertain. They are nevertheless often still managed as SMEs or as family owned companies.

#### **Flanders Characteristics:**

- **Main Product Group: (1) Home textiles, esp. Carpets then (2) technical textiles**
- **Main Markets: EU as a whole (domestic market is small) + Russia**
- **Distribution: Contract market, mainly large retailers**
- **Focus on Weaving but substantial vertical integration**
- **Mainly larger SMEs. Predominantly Family Ownership**

## 4.2 MAIN PROBLEMS

### **Vulnerable Specialisation**

An important feature in both regions is that the industry is rather strong in segments of the textile market characterized by low growth and a cyclical demand pattern. It is even world leader in some segments (e.g. carpets and lace) but that also means that the industry in the regions takes the brunt of the shock during a recession. But they see only small growth in the upswing. The effect is thus slow decline. Technical textiles has been a growth segment, but companies in both regions take often a more modest position compared to Germany and in France compared to Rhone-Alpes. In this industry segment the companies are smaller and show less leadership in innovation than for the leading regions.

The response which shall be elaborated with respect to the carpet and lace cases is one of consolidation (mainly in Belgium) and retrenchment (mainly in France). Another response is to diversify towards technical textiles. The first trend leads to reduction in the number of factories (and also decline in employment. The second trend leads to reduction in workers, company closures but often with integration of assets into surviving firms. In Belgium the carpet industry has lost its SME character, although the now larger firms are still managed as family owned SMEs. In France the leading firms have all downsized to the level of SMEs.

### **Relations in the supply chain**

In this paragraph we focus on the market position of the companies in both regions. The industry is highly depending on decision making power outside the industry and often outside the region. A common feature in both regions is a very high orientation of SMEs in the consumer sectors on organized retailers. This is both true in fashion/apparel and in home textiles. In these segments manufacturers can be characterized as comakers for retailers and designers. In technical textiles most companies provide components to industrial clients but rarely “total solutions”. Hence most companies are at risk being squeezed between powerful clients and large suppliers. The latter problem is exacerbated with rising material prices.

In both regions manufacturers have attempted to shift out of the private label market and to branded products. This has either not succeeded and when it was successful the headquarters did often move to Paris in order to get closer to relevant production factors. In the French case brand manufacturers were often amalgamated in larger groups and the sites relocated. In both countries manufacturers with own brands often supply an independent retail base that is increasingly weakened by the advent of verticalized formula and large retailers. Hence the branding strategy may have saved the company but rarely substantial employment in the region.

A major difference between Belgian and French Manufacturers is that the former have a very high export ratio (above 80%) while the latter supply more than 80% of sales in France. Although the French retailers are major clients for the Belgian SMEs, France does not represent more than 30% of sales. The strong presence in UK, Dutch and German markets somehow makes the Belgian industry less vulnerable. In furniture fabrics and home textiles the Belgian industry has a more up-market position. This has also enabled the Belgian textile firms to approach new export markets. In France only the lace industry has a very international outlook.

### **Delocalisation of Production**

An answer to the pressure of clients has been to delocalize production, in the case of the companies in these regions mainly to Northern Africa. Delocalisation by contract manufacturers – has been a dominant trend all over

NW Europe since the mid 1980s (Scheffer, 1992, 1994). In retrospect this has been, at least for suppliers to organized distribution, a postponement of company closure. Delocalisation has only been successful (in terms of company survival) when the principal was able to increase its control over the supply chain through branding. In comparison to Dutch firms and to firms operating out of Brussels or Paris this has rarely been done by companies in the region. Delocalisation in the textile industry has rarely occurred. Only the carpet industry has set up subsidiaries in the USA and China to be closer to final markets (by companies growing out of their SME status).

The company Artex Confection, in 2006 still identified as a success story in a study for the European Commission, went in bankruptcy proceedings in 2010 was a typical example. It was a company highly depending on large retailers fast fashion orders. For longer lead times it relied on manufacturing in Tunisia. Its 150 workers in Northern France specialized in products with one week lead time. The company had to close down because of a dramatic decline in orders in 2009/2010. The remaining Belgian suppliers to large retailers (e.g. Tonickx: an SME if one excludes the factories in Tunisia and Romania) have survived because of an ability to develop own collections.

### **Shift to Technical Textiles**

A second pillar in both regions is the industry supplying to industrial markets, most notably **technical textiles**. For Flanders this segment represents around 40% of industrial activity. For Northern France it is likely to be somewhat higher. The technical textile sector had the most severe dip in the recession but a rather good uptake and recovery in 2010. However it entered the crisis in relative good shape after more than a decade of double digit growth. The technical textile industry has a tendency to grow either because of internal growth of established players or because of diversification of textile firms in other activities. Some have the form of spin-offs or of MBOs of larger groups. Start-ups are rare in both countries.

In Northern France the technical textile sector is almost exclusively made up of SMEs although some consolidation has occurred such as the emergence of the Fauchille Group through the acquisition of some 6 textile and plastic firms all specialized in technical markets. In Flanders some large companies have emerged out of family-owned SMEs, such as Sioen before the turn of the century. In volume large companies do now dominate the technical textile sector in Flanders with some smaller companies acting as specialists.

### **Weakness of industrial suppliers**

The presence of large fibre suppliers may be an asset for the region. Their presence is limited since the fibre sector has restructured considerably over the last ten years both in synthetics (Rhodia, Tergal) and in natural fibres. In Flanders some companies are vertically integrated (e.g. Domo, Beaulieu). The wool and cotton sector has disappeared. The linen industry is very small. What is of relevance is that both Flanders and Northern France (and also the Netherlands, closeby) are emerging as a leading zone for the manufacturing of biopolymers and bio-based fibres. The strength of the agricultural sector is therefore a key asset for the regions. Downstream networking is emerging, also thanks to the activities of research centres (ENSAIT in Roubaix). First products have been launched in 2009-2010 (e.g. carpets and geotextiles), but not yet by SMEs.

The textile industry often gains in flexibility and in scope of product offer by the presence of specialist firms either in specialty spinning or in commission finishing. A segment that has almost disappeared in both regions is that of spinners and of commission dyers and finishers. In both countries a handful is left since the demise of e.g. Steverlynck (B), Barbry, Vallys and SIH (F), all commission dyers or of spinners such as Zulte Spinnerij (B) and Kortrijkse Spinnerij (B). The fibre sector is still present with one comber (Dumortier) and some linen processors (e.g. Procotex). Several reasons are attributable to this. In the first place both segments thrived on a critical mass of

clients. These disappeared in apparel textiles. Because of lead times and travel costs, the catchment area for dyers is around 250 km. Only for specialties a larger area can be covered. Unfortunately the dyers in both regions have been less oriented towards more specialized finishes.

In the major remaining segments, vertical integration was the main strategy. There is an interaction here since the decline in the number of dyers is in turn a reason for the remaining clients to become less dependent and invest in their own facilities. Vertical integration is part of the process of consolidation in Flanders and often takes the shape of quasi integration in Northern France (whereas several fabric producers take a share in a common supplier/subcontractor).

### **Innovation Capacities**

The SMEs in both regions have a strong incremental innovative capacity. This is mainly because less innovative companies have closed down in the period up to 2005. On the French case the focus is rather on product innovation, while Flemish companies rather focus on process innovation. Responsive innovation (responding to end users needs) is part of the DNA of the industry in these regions. This is especially so for the Flemish SMEs that have a strong “can do” attitude and are keen on bringing a constant flow of incremental changes. In addition the high wage level in Flanders leads to a constant pre-occupation with productivity.

The French companies have a comparable attitude but with an engineering perspective. Their innovation perspective is rather adaptive and focused on creating new combinations of existing technologies. Especially in technical textiles French companies position themselves as project-oriented, solution providers. The industry has shown leadership in disruptive innovation in carpets in the 1970s and now possibly in application of biopolymers.

The Flemish textile industry was in the 1960s and 1970s the first to adopt tufting methods in carpet making. This made carpets available for mass consumption and changed the rules of the market. The Flemish companies have a track record of being excellent second movers, being able to take up technologies that have overcome their initial defects. However in doing so Flemish textile firms are excellent in implementation of new technology with high productivity and flexibility.

More recently biopolymers and natural fibres have gained interest as source of new products. The industry is helped by the local presence of flax growing and a large share of investments in biopolymer products (e.g. Total, Arkema and Roquette). Projects have also led to spin offs (e.g. Ecotechnilin) or taken up by existing firms, such as Procotex in an EU funded project.

In picking up new technologies the Northern-French Flemish industry can be characterized as follows:

<i>Processes</i>	<i>NPC</i>	<i>Flanders</i>
Automation of production	Second Mover	First Mover
Volume processes	Second Mover	First Mover
Take up technical textiles	First Mover	First Mover
Artificial Grass	No Presence	Second Mover
Composites	First Mover	Second Mover
Digital Printing	Second Mover	Second Mover
Biopolymers	First Mover	First Mover

### **Restructuring**

The economic crisis of 2008/2009 had an important impact on the industry. In France the decline in output was close to 20% with some higher figures in suppliers to the luxury industry and to the automotive industry. It was followed in 2010 by a reasonable good recovery. In Flanders the decline was almost 30% with stronger figures in the home textile and carpet sector. The recovery in 2010 was modest (+6%). This is a good record in a normal year but not after a deep recession.

The restructuring took different forms in both countries. In France it led to a substantially higher number of company failures. In Flanders the number of company failures was “normal” but there was a strong decline in employment. The differences can be attributed to differences in capital base and in labour market flexibility.

In Flanders the solvability ratio of textile firms is high: 46% on average in 2007, before the crisis. In France the solvability ratio before the crisis was substantially lower (35%). Moreover a substantial number of firms had gone through leveraged buy-outs in the period 2000-2010 and had a weak capital base. In Flanders the presence of foreign capital and leveraged capital structures are not prevalent and in terms of capital the Flemish industry remains largely family owned.

The Flemish industry had the benefit of a temporary unemployment scheme. This is a scheme already in use for a long time that enables companies to lay off temporarily staff in low season or conjunctural downturns. The industry has largely used this scheme in 2008/09. In addition the demographic composition of the work force (in both countries) enabled the industry to rely on early retirement schemes and non replacement of vacancies.

### **Employment and Training**

Of structural concern in both regions is the very low number of students choosing textile education. In Flanders this concerns all levels of education, in France all levels except higher education. Low level of recruitment leads to an ageing of the workers population (with rising wage costs) and the danger of loss of skills. The recession temporarily softens the problem of recruitment, but enhances the ageing of the workforce.



In Flanders the uptake of students across the board is below industry needs. While the industry needs some 1000 new workers to resolve natural turnover, the specialized education output is below 100 students a year. All secondary textile courses and all but one higher education courses operate below acceptable capacity levels. This means that the Flemish industry had since 2000 a constant shortage of workers except for 2008-2009. The occasional company closure offered the remaining companies a pool of skilled workers. Otherwise the Flemish industry could recruit skilled workers from France and Wallonia, comprising now some 25% of the workforce.

In France the uptake of students is also below the needs of the industry. The education system is still well developed with three engineering schools (Douai, Lille, Roubaix) and several technical colleges (e.g. Calais, Tourcoing, Caudry). Uptake has increased at higher education level, for which the Nord now performs a national function while it is declining at middle education level.

Both regions have traditionally a good training infrastructure. For France the training infrastructure is in good shape for higher education, as indeed ENSAIT has managed an impressive turnaround and has been able to increase its number of student entries to over 100. Training at lower levels is however in difficulty with a student uptake below the levels required by industry. Especially craft based industries such as the lace making in Calais and Caudry suffers from a loss of skills and an ageing working population with difficult replacement.

Both countries have been working at PR actions towards education and recruitment. In Flanders as a specific initiative called Texstream, in France under the umbrella of the textile association (with assistance of the national training board FORTHAC). However PR activities suffer from the regular flow of bad news from the industry itself. A more differentiated PR approach is nevertheless tried by all major actors, however with little effect.

## 4.3 CLUSTER AND COMPANY STRATEGIES

### 4.3.1 FOCUS ON THE FRENCH LACE CLUSTET: BACK TO SMES

Northern France has had a strong lace cluster, partly imbedded in a tradition of hand-lace and embroidery going back to the Middle Ages and in an early industrialization around 1850. The lace cluster concerns the city of Calais and the district of Caudry, near Cambrai. Both clusters took over the Leavers lace making technologies of Nottingham, so called mechanical lace. Till the end of the 1980s both districts competed with Nottingham for leadership in the leavers technique. Although both in decline since the 1990s the French cluster prevailed since it was better connected to the luxury *lingerie* sector in France while the Midlands lace makers were targeting more mainstream market. Nevertheless an industry employing some 3000 workers has contracted to some 1200 workers in 2011, the majority of them in Caudry. Lace-making is typically a matter of leadership in a shrinking niche. And as this niche is depending on a very specific technology it involves important sunk costs and barriers to entry but also it leads to constraints in design. A niche it is, since the making of lace – especially in the leavers technique - demands trained, qualified and experienced workers. Calais has suffered much due to a plain and less lacey fashion look in *lingerie* over recent years. Lace is thus also a cyclical sector.

#### Technical and Commercial Change

Leavers Lace is the qualifying technology in Calais and Caudry. Leavers machines give a wide scope of design, but despite partial automation this is still a complex technology. The complexity is an entry barrier, all the more so that leavers machines are no longer manufactured and that the re-engineering of machines is a dedicated activity.

Newcomers e.g. in China and Japan can only enter the leavers market by buying up equipment in Calais or Caudry. Since the manufacturers are most jealous of their skills, the machines are not to be visited, nor to be copied. Also the dyeing and finishing of leavers lace demands specific equipment and skills. The complex and labour intensive process makes of Leavers lace an exclusive process only affordable for luxury ladies wear, exclusive bridal wear and high-end *lingerie*. Caudry is proud of having supplied the lace for Kate Middleton's wedding dress.

In the 1990 Jacquardtronic and Textronic machines came to the market offering products close to leavers (but for the expert buyer not equal) at lower cost of production. Mainly the Calais lace-makers and less so the Caudry makers transferred part of production to Jacquardtronic machines and by 2000 around 70% of Calais lace in volume was in fact made on these systems. Since the Jacquardtronic system was easier to set up and use, also the manufacturers in Asia (mainly China and Thailand) invested in Jacquardtronic machines. This led to this technique becoming the standard in the mid-market and eroded severely the price position of lace, leaving leavers even more in a niche than it was. The new technologies created space for lace makers in the 1990s but by 2000 new strategies were required. This was especially needed since the lingerie market was taken over by large retail chains and *lingerie* brands engaged in globalization of production.

Calais companies mainly took the route of retrenchment and downsizing. Specific to Caudry is a diversification in markets. This diversification has partly occurred within the lace companies and partly within the cluster. The nature of the industrial process is to look for high-end niches. One diversification is into technical textiles, which is often oriented towards knitted pre-forms for composites and for knitted fabrics for medical use. More experimental is the use of embroidery technologies to make smart textiles, as this technique enables to place precise patterns. Caudry companies have been active in EU funded projects.

More recently lace has become the focus of regional research and development projects such as laser cutting, substitutes for graphite in knitting of lace and customization of lace making. The total budget for research has been close to 2 Mln Euros over the last five years. All projects have been collaborative.

### **Consolidation, Globalisation and Cooperation**

An important trend has been consolidation of the lace cluster, globalization has also occurred. In the 1990s there was a European consolidation stage with the Calais based Brunet taken over by Sherwood (UK) and Desseilles by Courtaulds (UK). Noyon remained independent but was in 1990 the market leader in leavers lace having taken over Darquer in Calais. The Caudry cluster consolidated somehow with Sophie Halette taking over Riechers Marescot in Calais. Thus by 2000 the lace cluster was dominated by four companies larger than SMEs. Courtaulds was also developing manufacturing units in Asia (China, Thailand and Sri Lanka) and Sherwood/Brunet had a factory in China from the 1990s with, since 2005, an additional unit in Southern China and Thailand. Brunet has closed its leavers lacemaking unit in Calais in 2009 (and sold the 19 looms to Halette). Noyon was late in globalization and did only start a factory in Sri Lanka in 2007 in a joint venture with MAS.

By 2011 Sherwood/Brunet is no longer a player in Calais, Desseilles is no longer part of Courtaulds and in receivership and so is Noyon. All lacemakers have not reached again the stage of SMEs except the Holesco group that is at the limit of SME status. The current "strategy" in a situation of retrenchment is to pool facilities. Hence the dyeing facilities of Noyon and Desseilles have been combined (then Bellier now Color Biotech). The Caudry lace makers have participated in the pooling of facilities. The major dewing house la Caudresienne is also used by other lace makers. The Moulinage du Plouy (also in the region) is the major supplier of specialized yarns. Both Calais and Caudry have still a specific training infrastructure oriented towards the lace industry. This is an important

agglomeration effect, all the more so since labour turnover is low in both basins. Maintaining key skills and staff is, as in all niche sectors, a major challenge but retaining skilled staff is essential to survive after the upturn.

### **Retrenchment and Financial Factors**

The lace industry has a tradition of financial independence, partly to protect the business against the cyclical nature of the industry. Oddly the companies in the lace clusters in Calais and Caudry had comparable and high solvency ratios in 2007 (above 50%), nevertheless the Caudry cluster survived fairly well, while the Calais cluster entered in major difficulties. The dip was deeper in Calais, the overhead structures higher and Calais combined an economic down-cycle with a fashion down-cycle and a change in supply chain.

Companies report problems in access to finance. However a decline in sales has also a depressing effect on the amount of working capital required. Hence the limitation in commercial credit was not a serious problem during the downside. It became one in the economic upturn and mainly companies with an already stretched balance sheet went into trouble or companies with high overheads compared to turnover. Moreover investment plans were largely put on hold and acquisition activities were also turned down. Restructuring is impeded since financing for buy-outs is not supported by banks. Hence current managers and owners are in a favorable position compared to newcomers.

In France access to export credit was relatively positive. Access to finance for innovation remained good in France as long as agencies such as Oseo have continued to fund innovation and technical assistance in companies. The restrictions on commercial credit and on export credit played a more important role in the economic upturn in 2010. The lack of access to commercial credit prompted a second wave of restructuring in 2010. Companies were after the upturn to weak to finance the recovery.

Another factor is the flexibility of the labour market. The Lace industry was able to absorb part of the shock through reduction of overtime and number of shifts and then by using temporary unemployment. More over key workers are paid on output and productivity. Hence salaries absorbed part of the downturn. This enabled an effective temporary retrenchment. Bankruptcies mainly concerned companies that were in a difficult market situation before the crisis and had already a weak financial position (solvency ratio below 20%).

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#### **4.3.2 FOCUS ON THE FLANDERS CARPET INDUSTRY: NO LONGER SMES**

The Flemish carpet sector is the largest segment within the regional textile industry. Detailed figures are not available but interior textiles represent 42% in turnover and some 175 companies employing almost 12000 workers. It is mainly localised on the axis from Gent to Kortrijk. The Flemish carpet industry was initially, and for a long time, an SME dominated industry. While capital is still predominantly family owned and companies family run, the carpet sector is no longer an SME sector by formal characteristics. It is nevertheless an SME sector by culture. Recent years have seen major consolidation of the carpet sector. Unlike other sectors carpets are not mainly affected by globalization of production but rather by a shift in consumer preference from soft floors to hard floors. This leads to an overcapacity. Relative growth markets are institutional markets (offices, hotels, etc...) and sport surfaces. These markets demand scale but these markets are also more cyclical than consumer markets. This fosters consolidation. Hence the Flemish carpet industry is no longer an SME sector. The Flemish carpet industry is the largest cluster in the European industry, but it is closely related to the Dutch and to the German carpet industry and most French carpet manufacturers are already part of Flemish groups.

## **Technical and Commercial Change**

The major three changes in the carpet industry are vertical integration in fibre processing, technological developments downstream and diversification to technical markets.

A first trend is to engage in fibre production. The main motive is to control a higher share of the value of the product and to be less dependent on price fluctuations. This motive is likely to be relevant for the coming years. An additional reason is to be able to save costs through process integration and it enables further control over product differentiation by developing masterbatches. It is noticeable that carpet manufacturers are (with some caution) testing biopolymers and fibres made from bio-based precursors. A comparable trend in vertical integration is to internalize energy production and management, since energy costs is the biggest component in value added. These trends foster economies of scale, especially in the form of larger plants.

A second trend is to invest in technologies downstream. Much has been done to reduce lead times, work in progress and stock. The financial crisis has been an impulse for reducing working capital. Another objective is to come to more product differentiation at the later stage of manufacturing. Some technologies involve dyeing of carpets after weaving, which is possible by controlling fibre processing. A technique of product differentiation is to use digital printing of carpets. A further trend, also visible in Flanders, is to increase environmental efficiency by using indeed biopolymers and by developing cradle to cradle concepts. However it is the larger companies that take the lead in these subjects.

A third trend is to engage in technical markets. One is a necessary concentration on institutional markets which are technically more demanding. More substantial is the shift to geosynthetics, already well engaged in the 1990s, and more recently the investment into artificial grass. The Flemish carpet industry is here a clear second mover after the Netherlands which hosts the market leader TenCate as key supplier to Dutch carpet makers.

## **Consolidation, Globalisation and Cooperation**

Consolidation has taken the place of substantial take-overs. The objective has been for individual companies to increase their own capacities without adding total capacity in the market. The consolidation has been partly in the form of smaller companies being taken over by larger groups (AW by Beaulieu), larger companies merging (e.g. Balta taking over Domo) or smaller players joining forces (the formation of the McThree group). Smaller players have been squeezed out of the market unless they are specialists in a niche (e.g. BIC and Creatuft).

Carpets are not an easily trade product unless in areas like commodities such as bathmats and small rugs. In the larger wall to wall products markets are still regional in nature. Production must be close to the end-user. Globalisation has mainly taken shape in setting up subsidiaries in the United States, still the largest carpet market in the world. This is only done by larger players. SMEs do not have the capital base to engage in overseas production. Export is the main form of internationalization. 94% of the interior textiles sector is being exported, but with some 85% oriented towards the enlarged EU. The industry is cooperating in a joint export strategy and planning.

Consolidation has mainly occurred amongst larger firms. Smaller players have been restructuring but often with a closure of bankruptcy. The crisis did not speed up the process. Since 2000 a constant flow of closures has occurred (Empire 2005, Nelca 2007, Fenaux 2009, Prado 2009, Coucke 2010). Larger groups have merged also with the result to close smaller manufacturing units (e.g. Balta and Domo or Beaulieu and AW).

Cooperation is a difficult matter in the Flemish carpet industry. Of course the industry shares important common resources in associations with a strong promotion and export plan, research centres such as Centexbel and ERCAT

at the University of Gent. In addition the industry gains in coherence by joint suppliers especially in machines. However the relation between companies is rather one of competitive emulation than of cooperation. With increased vertical integration cooperation is even decreasing.

### **Financial factors**

The economic and financial crisis of 2008/2009 is an additional factor on top of many others. In carpets most players agree that structural stagnation is likely in Europe because of a blocked housing market (credit crunch and demography). The office market is also characterized by overcapacity in Europe. In addition consumer preference shifts to hard floors. The growth market for carpets is rather in Asia and less so in the USA. This demands the setting up of production sites close to the market since the bulky character of the product and the need to have quick response production in order to limit stock (and immobilized working capital) requires plants in the final market.

Hence the crisis for the carpet industry is both a matter of cycle and of structural change of markets in Europe and a shift of demand to Asia and emerging markets in general. This strengthens the need of consolidation both in Belgium and with respect to the major competitor in Europe, the Dutch carpet industry. The industry enters this restructuring in a rather healthy situation for the larger companies but with a rather weak balance sheet for the medium size and smaller firms.

## **4.4 SERVICES/SUPPORT TO INDUSTRY AND CLUSTER DEVELOPMENT**

The industry in both regions has a historical embedding and the level of organization is high. For Northern France a range of regional organizations exist, some of them have taken the form of clusters (e.g. Uptex). In Flanders, the region being the host of most industrial output in Belgium, the national bodies can be considered as predominantly serving the region. It is a matter of debate whether the cluster is a correct representation of cooperation and services in the region. One may rather qualify the collective organization of the industry as a heritage of a corporatist period.

This is characterized by:

- A high level of organization/membership of professional bodies
- A strong relation with labour unions, characterized by negotiation but also shared objectives
- A strong involvement in training, research and promotion bodies
- A strong connection to political representation and regional authorities

In general industry specific services dominate over more generic services. In research, testing, training, social affairs and export promotion industry-based services are dominant. For finance services are largely generic.

### **Clustering**

In Flanders the industry association is the focus of collective activity of the industry. The erstwhile textile federation FEBELTEX has merged with the association of the furniture industry into Fedustria. Febeltex had already become the single body of the textile industry as regional syndicates and sectoral bodies had merged into one single

organization. Fedustria supports its members from three locations: Brussels, Gent and Kortrijk. Fedustria has also a stake in paritary organizations, especially with regard to social insurance and training. Within Fedustria thematic groups have emerged, the most active ones being focused on technical textiles and on interior textiles (including carpets).

In Northern France the associative landscape is slightly more complex as it combines regional organizations, the main one being the UIT Nord (Union des Industries Textiles) and local syndicates. The latter have few resources and operate rather as meeting places and as sponsors of projects. UIT has an office near Lille and integrates a number of sectoral and thematic bodies. The clothing industry and the knitting industry still have their own legal bodies but they are located in the premises of UIT. Of relevance is the setting up of a specific body for technical textiles: Clubtex. Initiated in Northern France, Clubtex somehow goes beyond regional borders with members in Picardie and Champagne-Ardenne. Clubtex has also liaised with similar organizations in other countries (e.g. TexClubTec in Italy).

Specific to France is the setting up of Uptex, which is recognized as a *Pole de Competitivité*. The specific focus of UPTEX is on stimulating research and innovation, but it takes a rather broad view of its activities since it also promotes cooperation amongst firms, the provision of market intelligence and technological intelligence. Its activities have also an impact in reaching out to new product market and to new geographical markets, e.g. by organizing trade missions. In Belgium Centexbel plays the role of clustering in the technological domain.

Besides training and research, the main activity of the collective organizations is export promotion. This is conducted in a rather classic way with collective stands at trade fairs (e.g. Techtextil and Heimtextil), export missions and PR activities. Of relevance is that for both regions the actions are carried out in a consistent way, with partly government support. The consistency of strategy and execution has led to a good network of contacts and deep market intelligence.

## **Research and Innovation**

The region hosts two major research centres that rank amongst the centres of excellence in Europe: ENSAIT in Roubaix and the Department Textielkunde at the University of Gent. Other research groups are of relevance such as the Ecole des Mines de Douai (F) for composites and the University of Lille for chemistry and material science. Gent hosts also the CTO2 at the Hogeschool and strong research centres in biotechnology and in material sciences at the University. In addition the regions have two major technical centres: IFTH in Villeneuve d'Ascq (F) and Centexbel in Gent (F). The profiles of some of these centres is described in the section on research (Task 2).

A deeper analysis of relations between research centres and SMEs is given in Task 2 Research and Development. In general the relations between research centres and companies are relatively good. They are rooted in France in a strong professional relation, since ENSAIT is the main provider of engineers to the industry. In Flanders a commercial model prevails since Centexbel is an important test centre for the industry. The commercial activities of IFTH are less prominent, whereas in Belgium the professional interaction is less developed. University of Gent has a testing role when it comes to artificial turf (ERCAT).

In both regions the level of exposure to research for companies is high. Universities and industry organisations are active in organizing conferences and in assisting companies in technology monitoring. Cross border activities are well developed. A good example is Futurotextile an annual event hosted each year on one each side of the border. The opportunities for regional funding are in both regions good with funding agencies that are well connected and responsive to the industry. Research centres have learned to work with industry and SMEs in particular. Collective

research is also well established with projects under the umbrella of Centexbel and of UPTEx. In both regions industry and in particular SMEs are well integrated into European research. However a close look show that around 20 companies in each country are working intensively with RTOs whereas for most SMEs the relation is rather superficial and limited to attendance in events, training and testing activities. Efforts of industry association to increase the level of interaction have been successful in creating best practices but may need a further mainstreaming.

#### 4.5 SWOT AND ANALYSIS OF LOCK-INS

The success of both regions is limited although Flanders has shown high resilience in maintaining a broad presence in carpets and interior textiles. Flanders has maintained a consistently lower rate of decline than any other region in textiles in Europe and has till now avoided outright downsizing. This means that the decline in employment has been absorbed by growth of other sector. However in the restructuring process the industry has kept a culture of SMEs but has no longer a structure of SMEs. This resilience only applies to textiles. The clothing industry has downsized considerably, notwithstanding delocalization of production.

Northern France shows a similar resilience in the Caudry lace industry, but the Calais district has performed less well. Overall the industry has made a good turn towards technical textiles and overall the performance of technical textiles is rather one of relative good holding up of this industry compared to home textiles and apparel textiles. The clothing industry has more or less disappeared both in terms of manufacturing and in design/marketing. Retailers have a primary position in terms of employment. Clothing retailers are ultimately a downstream diversification of the textile industry.

Within the regions analyzed the sub-clusters are examples of deep specialization with very specific equipment, skills and market positions. Lace and carpets are segments with relatively high entry barriers. In the same time both segments are niches and subject to strong cycles in demand and fashion cycles. In both regions there are rather successful clusters while the industry overall is in decline. This also applies to technical textiles, to the linen industry, to the interior fabric industry. However with strong specialization, the wool industry has succumbed from its lock-in factors and the clothing industry has disappeared for lock-ins of deep specialization.

Deep specialization often is associated with high lock-ins. Equipment is highly specific to the industry and products. The knowledge required is also specific and cognitive lock-ins are substantial. The institutional lock-ins are nowadays weakened because the industry is smaller and it requires institutions with a broader scope.

##### **Functional Lock-ins**

The functional lock-ins are substantial in both lace and carpets. These segments require very specific equipment, hence the barriers of entry are substantial. The will to overcome lock-ins in Calais by investing in jacquardronic lace was successful in the 1990s but in the last decade it no longer offered decisive advantage as these technologies were widely available in Asia. In both countries the established players aim at reducing opportunities for newcomers. Consolidation in capacity and assuring that key equipment stays in the cluster is an important strategy. In lace this is done by acquisition of assets, acquisition of machines and pooling of facilities. In carpets it is obtained by consolidation of the industry. Vertical integration is also a sign of deepening of specialization and increased lock ins. However the shift towards technical textiles is also an expression of an ambition to use equipment for other markets.

## Cognitive Lock-ins

In both districts/segments cognitive lock-ins have been high. This is especially the case in Calais that was solely oriented towards *lingerie* and where market trends and globalization of production went along a fashion cycle and an economic cycle. The attempts to overcome lock-ins by forming large international groups did not work in the last decade. The shift to technical textiles, the increased use of biopolymers point to a desire of innovation and diversification, pointing to rather weak lock-ins. The carpet industry has entered into an era of innovation after a period mainly focused on productivity. Biopolymers and sport surfaces are main areas of growth.

Maintaining the skills base is important. This leads to low labour turnover but also to an investment of the remaining companies to fill their skills gap with workers made redundant in ailing factories. There is a strong focus on maintaining skills while bringing newcomers into the industry is much harder. The number of entrants in technical schools is declining and new management is discouraged by tough conditions set by financiers.

## Institutional Lock-Ins

The institutional lock-ins are rather positive in both regions. Strong and forward industry associations are combined with good research infrastructure. Also funding for innovation and credits for innovation are well developed. Both regions are strongly unionized but performance related pay make that salaries are fluctuating with the health of the business. In Flanders there is a system of temporary unemployment that makes possible to absorb downturns. In France though, production-related pay is specific to the lace industry.

## SWOT Analysis

### Strengths

- Entrepreneurship
- Financial Conservatism
- Incremental innovation
- Export orientation
- Good collective organisation

### Weaknesses

- Lack of long term vision
- Depending on Contract Markets
- Focus on low growth markets
- Little fundamental innovation

### Threats

- Globalisation of markets
- Lack of access to financial markets
- Ageing of work force – few entrants

### Opportunities

- Globalisation of markets
- Technical textiles (niches)
- Sustainable development

Although the two regions differ in structure some common lessons can be drawn. Entrepreneurship and financial conservatism is certainly an important strength. However a downside is a high dependency on contract markets and a focus on incremental innovation. Besides this, an upcoming trend since 2007 is the development of use of biofibres and biopolymers. Such an uptake could be fostered by more collective support. However an FP7 proposal



submitted by major actors in both regions (on flax and on biopolymers) has not been retained for funding in 2007, 2009 and 2010.

Globalisation of markets is an opportunity and a threat depending on the ability of the industry to organize itself. In terms of export position a foothold in emerging markets is being created, but further expansion may require production close to these markets.

#### 4.6 CONCLUSIONS AND SUGGESTIONS FOR PUBLIC SUPPORT INITIATIVES

Both cases, in fact sub-cases in the region, show the resilience of two niche industries and the difficulty of being and remaining SMEs. In Northern France leadership in a high-end niche has not translated to a consolidation and leadership hence to the transformation of a more international and large scale enterprise model. In Flanders the carpet industry has gone through a consolidation and is only in culture an SME sector. The difference between the two sectors is the nature of the technical process. Both sectors are capital intensive, however in the lace sector it is the result of accumulation and reengineering of old technologies with economies of scope. In the carpet sector it comes through economies of scale attained by an ideal complex of state of art technology. The lace market addresses a fragmented high-end market of luxury brands. The carpet market addresses large retailers and institutional clients but also in global markets.

However both sectors show a cognitive agility by being open to new technologies, to new materials and to new markets. Especially technical textiles are seen as offering opportunities for diversification. In general the transition from classic textiles to technical textiles has been completed, since most companies have now a foothold in this market. In doing so they have also mobilized technology skills present in the region (at ENSAIT or Centexbel). In addition both clusters have identified the need to operate at a global scale. An important difference between Belgium and France is that the former have funded R&D centres with an industrial levy which assures continuity. In France the technical centres have a less stable funding base which threatens their continuity. This is an important threat since it appears in Task 6, for other regions that innovation (not research) benefits from the continuity of industry oriented centres.

An important cognitive problem is the shortage of skills in both industries and the increased difficulty to externalize training. In both regions the decline in the number of students is faster than the decline of employment. Although the education establishments are aware of this trend, their ability to react seems modest. In the larger companies training can be integrated, but SMEs need to rely on external training facilities.

With regard to the lace industry in Northern France, one should keep in mind that it is part of a unique European heritage, which also comprises other traditional sectors (silk, wool). Although the industry in both countries have made efforts to keep and develop the skills base, with interesting practices of PR and aligning curricula to industrial needs, the quantitative effect has been modest. A European approach in exchanging and developing best practices in craft based industries is recommended.

Institutional factors are rather positive for both clusters. Trade associations are active. In Belgium the broad legitimacy of Fedustria gives the industry cohesion and an active agenda, in Northern France, the transformation of the traditional industry association UIT Nord in the technology cluster Uptex is an example. This transformation has created an active research agenda and programme to the benefit of SMEs. Research centres are strong and cooperation is, albeit with some difficulties, well established, mainly through collective organizations. Wage

formation in both clusters is flexible to cope with cyclical downturns, but flexible payment is often a factor of lower attractiveness of the industry in the long run.

Finally both regions are (with the Netherlands, Northern Germany and Northern Italy), leading in the development of biopolymers and the survival of a biofibre based industry (flax) at times when a biobased economy is aimed at, makes this a vital resource on which a shift can be based. This requires more urgency on behalf of industry and policy makers. If the transition to a biobased economy is one of the great challenges for Europe, Northern France and Flanders may be for textiles one of the seed beds, provided enough regional urgency and bundling of efforts is organised.

### 5.1 BACKGROUND

Together the Portugal North (NP) and Galicia regions account for a surface of 50.852 Km<sup>2</sup> and a population of approximately 6.5 million inhabitants. In relative dimension NP represents 24 % of Portugal's continental territory and 37% of the population while Galicia only represents 5.8% of the Spanish territory and not more than 6.8% of the countries' population. Both regions aggregated GDP sums up to 88,3 thousand million Euros (2005 figures), representing 8,3% of the total Iberian Peninsula income.

Through most of 20 land cross borders between both regions the average vehicle intensity reaches the figure of 43.677. 54% of the automotive traffic (light vehicles) between Portugal and Spain flows between both regions as well as 40,85% of the heavy vehicles traffic between both countries.

Regarding imports and exports of goods, both regions have been able to maintain a relatively stable performance within the Iberian Peninsula context, being responsible for approximately 11% of international trade, and the import/export balance is much more positive than the average Iberian performance.

Looking at the specific importance of the Textile & Clothing business the Portuguese North Region is responsible for almost 84% of the total textile & clothing business of the Country<sup>6</sup>, therefore accounting for a total income of 5.140.000 (1.000€) with employment of around 128.000 people distributed over an estimated number of 7.000 companies, 95% of which are SMEs. T/C companies represent approximately 30% of total number of companies in the NP region. Looking at exports, the NP region sector has a well consolidated export vocation with a share of total exports of 61% of the total business and with a positive balance. As for exports there are no dominant company groups and the most representative products in terms of exports (49% of total) are knitted clothing garments and accessories spread over a significant number of different companies.

In the Galicia region the number of companies, according to IGE, is 1.862 of which SMEs also represent 95% of the total figure. The textile & clothing companies of Galicia are responsible for almost 12% of the Spanish textile & clothing production. In terms of textile & clothing employment the Galicia region has 21.191 employees, which clearly shows that in Galicia the average number of employees per company (11,7) is smaller than in NP (18,2). In fact, most of the companies in Galicia (80%) are micro companies, with less than 9 employees. The total income of the textile & clothing sector in this region accounts for 1.428.450 (1.000€) representing 12% of the total Spanish textile & Clothing business. It should be underlined that from the year 2000 until 2010 the representativeness of Galicia within the Textile & clothing Spanish business has almost doubled. According to IGE, the sector export accounts for a total of 2.513.000 (1.000€) while imports reach 1.757.412 (1.000€). However, exports from the

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<sup>6</sup> According to ATP (2010 figures) – 6.120.000 (1.000€)

Galicia region are highly influenced and dominated by companies and brands belonging to the INDITEX<sup>7</sup> group, installed in A Coruña. Textile companies represent approximately 25% of total number of companies in the region.

## 5.2 ANALYSIS OF CURRENT SITUATION AND MAIN PROBLEMS

The North Portugal T&C sector present situation is characterized by a certain positive wave, resulting from the return of several clients that were placing their order in the Far East and that now are looking for partners and suppliers in Europe. According to ATP figures, when comparing 1<sup>st</sup> semester of 2011 with the first semester of 2010, Portuguese exports have increased by 13% and the most important markets remain Spain, France and Germany. However at the same time, this positive trend is counterbalanced by a very difficult and restrictive access to credit due to the financial crisis in Portugal that is making finance less available and more expensive. At the same time there is a clear contraction in consumption that is negatively impacting the clothing retail business within the internal market – according to a recently published study by Kantar Worldpanel<sup>8</sup>, in the first six months of 2011, 47% of the Portuguese consumers didn't buy a single piece of clothing.

Although the domestic market is not the most important one in terms of volume for the Portuguese Textile & clothing sector (exports represents almost 65% of production), this contraction in consumption is still affecting negatively those companies depending on the internal market retail sector.

According to Mr. Paulo Vaz, Executive Manager of ATP: "Today's priorities for companies located in the NP region can be placed in three pillars in the following order: 1<sup>st</sup> ) Access to finance, 2<sup>nd</sup> ) Increase in Exports & Internationalization and 3<sup>rd</sup> ) Innovation & creativity. In terms of business models, most of the clothing manufacturing companies have been evolving from a complete subcontracting position, where the business was mostly about selling production minutes, to a hybrid model where the production of own brands coexists with a private label scheme. In this scheme, more than the product itself is supplied to the brand's owner that operates internationally and normally controls product distribution. In this hybrid model the company supplying the product plays a business partner role by becoming involved also in product design and development. This model has proved less risky than the 100% own brand strategy, where the financial effort in marketing and the amount of resources to be invested towards an upper position in the value chain, are not normally accessible to SMEs but only to a very restricted group of companies".

The importance of such model is even more valuable in today's environment of financial scarcity. In fact, today there are only 4 Portuguese global brands fully operating internationally and none of them is, or was, an SME: Salsa, Lanidor, Impetus and Sacoer Brothers. Mr. Vaz underlines: "White capital is one of the possibilities to finance such kind of internationalization operations for SMEs, mostly by finding local partners with an excellent knowledge of the market where the company wants to install the business and wanting to share the risk by investing on it".

T/C companies are constantly looking for new markets, either geographical, or in new applications for the textile product as a "flexible material". Most of the companies are trying to differentiate their products by incorporating new fibers, new finishing, new functionalities, with two major objectives: 1) Differentiate the product in current

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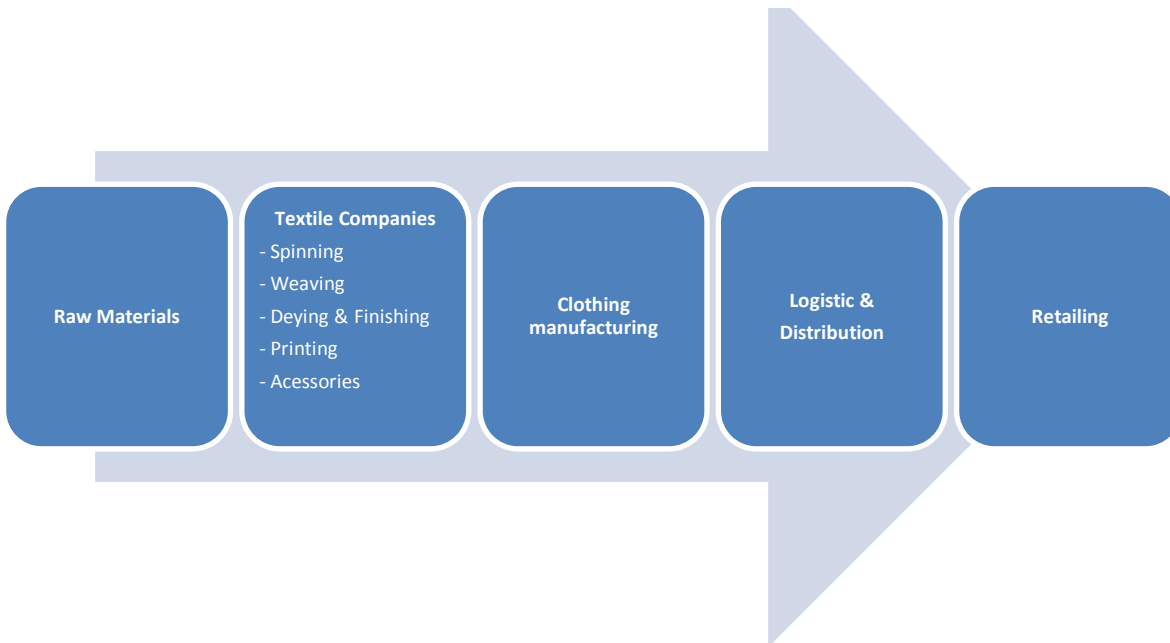
<sup>7</sup> INDITEX GROUP Brands – Zara, Pull & Bear, Massimo Dutti, Bershka, Stradivarius, Oysho, Zara Home, Uterqüe and Tempe

<sup>8</sup> Kantar WorldPanel is the world leader in consumer knowledge and insights based on continuous consumer panels (<http://www.kantarworldpanel.com>)

markets (mostly the case of textile for clothing/apparel) or 2) Enter new application markets, like automotive, healthcare or protective clothing, etc. The number of Portuguese textile companies participating in technical exhibitions like TECHTEXTIL or A+A<sup>9</sup> has increased by 30% since the last three editions.

The structure of the textile & clothing value chain in the NPG region has different dominant factors in NP and in Galicia. This has different influence in the way SMEs have evolved in recent years and in the challenges they face for the upcoming years.

Figure 9: Typical Value Chain Structure in NPG region



The textile part of the value chain is much more evolved and technologically updated in the NP region, while logistics, distribution, retail management and brand promotion is clearly the specialization focus of Galicia. However when we think about manufacturing SMEs the average size of the clothing SMEs present in both regions is significantly different. The average SME in the NP region is normally a small/medium size company while in Galicia micro companies with less than 10 employees dominate. Having a complete structured textile value chain (from fiber to clothing) in the Portuguese side, has made possible to develop in this part of the Euroregion, more technical niche market products, both in the field of technical textiles and in the field of functional clothing, while almost every SME from the Galicia region is focused on the fashion business.

Mr. Manuel Pinheiro is the CEO of NG Wear, a new born company which is the result of a spin-off from the SME TINAMAR. TINAMAR is a dyeing and finishing service provider for textile companies, has a total income of 5 Million Euros with 85 employees and has developed an innovative concept of functional clothing for mosquito protection. According to Mr. Pinheiro: *"It's more complicated for a small SME to build a development strategy focused on mass fashion products for international global market. Focusing on a niche market, like protective functional clothing allows an SME to grow in a more sustainable and controlled way"*. *"For this strategy in particular knowledge of*

<sup>9</sup> A+A - The world's largest and most important specialist trade fair for all aspects of safety and security with quantitative and qualitative first class product range

*materials and access to key textile processing know-how and technologies, was one of the important factors for the new product development strategy*". These opinions are in line with the idea that technical or functional textile/clothing SMEs in NP are more developed than those in the GALICIA region, thanks to the existence of a strong textile value chain. When asked about the main constraints for business development as an SME manager, Mr. Pinheiro points out that: "Access to credit is critical for an SME like ours in order to accomplish our strategic development plan and today that is becoming more and more difficult to access and normally in very aggressive conditions". "Also credit insurance is critical for SMES when it comes to explore new markets with new clients, in order to reduce risks". "Last, Mr. Pinheiro states that stronger market regulation for products imported from Asian countries is needed, in particular China, in order to ensure a more fair competition and to compensate European industry for the tight regulation and legislation in terms of environmental requirements, health & safety conditions or labour legislation".

SMEs' needs in terms of supporting services are also different in each region and they are influenced by their position within the value chain (from fibre to retail). Those companies positioned in the final stage of the value chain, starting in clothing manufacturing and very active in branding, distribution and retailing (Galicia case) clearly state that technologies and concepts aimed at sales promotion, marketing innovation, product differentiation in shop, innovative retail strategies, client empowerment and design management are key issues. On the NP side product quality control, innovative finishing technologies, new fibres and materials, new product development, production management, are at the top of the agenda when it comes to technical services outsourcing, reflecting a position in the value chain that is either closer to the textile production side, or is in clothing manufacturing but with very limited influence on product marketing, distribution and retailing.

Regarding textiles for the fashion business there is a strong knowledge in knitting production within the NP region with a group of companies supplying finished knitted fabrics to important brands like Lacoste, Burberry, Dior, Kenzo or Balenciaga. According to AICEP data, this particular sub-cluster grew in terms of export approximately 38% in 2010 and is still profiting from the promotion project for international markets developed by ASM – Associação Selectiva Moda - which in 2011 accounts for 61 promotion actions in 26 different markets.

Regarding the Galicia situation, recent figures from COINTEGA show that the positive trend in exports, which was positively evolving since 2005, is maintained. While the 2010/2009 trend showed a shy increase of 1,55%, the first six months of 2011 reveal a more robust increase of 18% compared with the first semester of 2010. The most relevant changing factor within the exporting profile of Galicia in this first semester of 2011, is that Portugal is no longer the first commercial partner and the first destination, but France, followed by Italy and then Portugal. According to Mr. Alberto Guisande, Secretary General of COINTEGA, this situation is stable and in terms of exports the objective is to maintain last years trend. According to him the two major problems that the companies are now facing are connected to access to finance and to a certain decrease in consumption. He states: "Access to finance in two different ways: short term financing for working capital and accessing credit insurance to reduce the risk of business in terms of payments, are the most problematic situations" .

Regarding the economic situation, the slow down of consumption in Spain is affecting mainly those companies working mostly to the internal market. According to INE figures, in September 2011 the Spanish retail sales decreased by 5.5% .

At present there are three realities that coexist in the region:

- A big multinational company (INDITEX Group) which is present in several countries with more than 4.200 shops and that controls every stage of its business process from design to distribution and sales.

- A group of companies that have been the leaders of the “Moda Gallega” slogan, and that have good design, high quality and strong brand image. In most cases these companies are the evolution of SMEs resulting from a strong entrepreneurial dynamism.
- A third group of very small firms (micro companies), with a productive concept very close to a craft business, with a lower technological level and not very qualified workers that are working in subcontracting arrangements for bigger firms.

Today the Galicia’s situation is very dependent on INDITEX due to the weight of INDITEX compared to the overall output of the Region. According to the different field testimonials interviewed, the manufacturing small firms are increasingly disappearing, while the companies belonging to the so called “Moda Gallega” concept are splitting into two different realities. companies that have their own distribution strategy and retail surface in a very competitive dimension, which is one of the most valuable assets in the retail fashion business today. This kind of companies belong are closer to the INDITEX business model and this is the case of STL<sup>10</sup>, Bimba & Lola or Adolfo Dominguez. The other type of companies distribute their products through multi-brand retail shops, mostly in the domestic market and do not have control on this part of the business. This kind of companies are more dependant on the Spanish retail market performance.

### 5.2.1 THE INFLUENCE OF THE INDITEX GROUP IN THE REGION

While the data of NP are not categorized by provinces, in the case of Galicia that analysis shows a tremendous influence of the INDITEX group, located in Coruña province within the overall performance of the sector.

Table 7: Galicia Total Clothing Exports by province in 2010

Total Clothing Exports by province in 2010		
Province	Value 2010 (1.000 €)	(%) 2010/2009
A CORUÑA	2.317.609,6 (96,9%)	1,69%
ORENSE	47.357,4 (2,0%)	-0,67%
PONTEVEDRA	25.989,4 (1,1%)	-6,59%
LUGO	1.200,0 (0,1%)	+21,8%
<b>TOTAL</b>	<b>2.392.154 (100%)</b>	<b>+1,55%</b>

Source: *Conjuncture Report, January-August 2011, COINTEGA*

The dominance of the Coruña province concentrating almost 97% of exports clearly shows the influence of the INDITEX Group within the T&C business in Galicia, particularly in terms of exports. This is very important to understand the existent difference of vulnerability to the domestic market, between the SME in NP and in Galicia. SMEs in Galicia are clearly more focused on the domestic market, since most of them are producing their own

<sup>10</sup> STL - Sociedad Textil Lonia is based in Ourense and owns major brands like Carolina Herrera and Purificación García.

brands to be distributed in multi brand retail shops or in some cases in their own retail channel (mono brand) mostly within the Spanish market. On the other side, it is also true that companies in Galicia profit from a very positive image within the Spanish market, which is still a very interesting market in terms of dimension. Brands like Purificación García, Adolfo Domínguez or Roberto Verino are well known brands from Galicia and every clothing manufacturer from that region benefits from this very positive image in general. But there is a strong potential for a higher exploitation of foreign markets also due to the product channels and image created by INDITEX through the whole world, and this has to be considered as an important asset for all the SMEs in the region.

According to COINTEGA, the almost 7% decrease of Pontevedra region's clothing exports is quite worrying since this province is the best reflection of SMEs performance. In comparison with the situation in NP, where there is not such a heavy dependency ratio on 1 group in terms of exports, SMEs are mostly exporting directly or indirectly, since most of the business models are not based on own brand production and distribution, but on a hybrid model, that combines both channels: private label (subcontracted) production and own brand production. The fact of the Portuguese market being less interesting in terms of dimension for NP companies (10 million inhabitants) pushed those companies sooner to a more international development strategy.

The result of this situation is that Portuguese SMEs, besides having a more active role in textile production (from fibre to final product) are more experienced in exports and in internationalization, than most SMEs in GALICIA. This difference holds a good cooperation field between SMEs from both regions, strengthening the vision of a clustered euro region (NPG) that can combine and integrate different links of the fashion value chain. While the Spanish companies from Galicia are more experienced in product development, retail & distribution, even if highly concentrated in their domestic market, Portuguese SMEs, due to their hybrid strategy, are more experienced in production, production managing and exporting to foreign markets.

However it must be underlined that the INDITEX group also has an important influence on NP companies, since a very significant number of production orders are placed in North Portugal. To counterbalance this effect it's also true that the NP region is not so exposed to INDITEX influence, because its industrial structure comprises a more heterogeneous profile, with different kind of companies, products (home textiles, technical textiles, ropes, etc.) and markets.

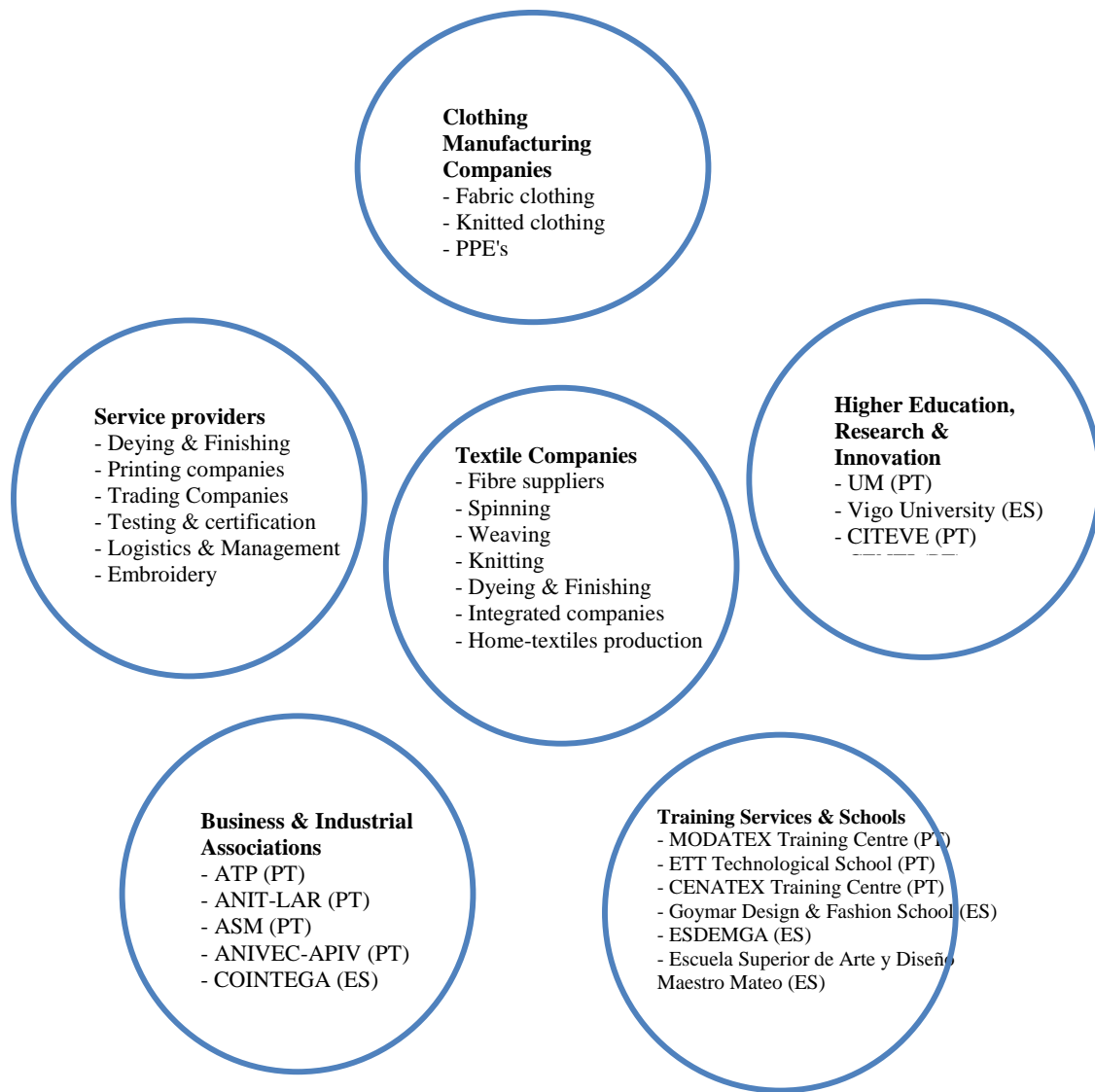
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### 5.2.2. CLUSTER DEVELOPMENT AND SUPPORT SERVICES

Taking the approach of cluster vision build upon a very complementary group of companies and services geographically concentrated and within a limited region, there is no doubt that one of the strengths of this region is the cluster-based setting that allows cooperation and subcontracting relations in order to answer to a final client. Figure 10 below identifies the type of organizations and companies that are present within the NPG region and how they are linked either through business relation or cooperation relations.



Figure 10: Active Organizations in the NPG textile cluster



One of the missing links of this cluster is the absence of textile & clothing related machinery manufacturers. The proximity of machinery developers and manufacturers and T/C producers is well known as an important competitive factor in the development of T/C clusters in Italy, like the Prato cluster, where the machinery manufacturing sector still is an important sector. The geographical proximity between machinery manufacturers and textile companies very often results in mutual cooperation leading to specific machinery adaptations which will allow a specific company to achieve a comparative advantage resulting from an almost “exclusive” development. This type of cooperation does not exist within the NPG region due to absence of a strong T/C machinery construction sector.

Despite the cultural proximity between North Portugal and its bordering regions, like Galicia which was even made official through the founding of the Galicia –North Portugal Region Work Community in 1991, the economic

relation and cooperation between T&C SMEs from both regions is far from achieving a significant development level, either in terms of dimension or in terms of results. One of the most recent projects that specifically addresses the cooperation between NP and Galicia within the textile & clothing value chain, is the EUROCLUSTEX project. EUROCLUSTEX was developed under the POCTEP trans-border cooperation program and its objective is to consolidate an interregional T&C cluster, leveraging cooperation between companies and organization, beyond just commercial flows between regions.

This initiative was built upon an important previous consolidated experience of cooperation between both regions at a more political level (multi sectorial) and allowed two of the more active industry associations in the region (ATP and COINTEGA) to set up a common internationalizations plan promoting the cluster as one and profiting from the existent complementarity within the entrepreneurial fabrics of both regions.

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### 5.2.3. SMES TESTIMONIALS

**INARBEL** is a clothing manufacturing SME, based in NP, active since 1984. Today with a global turnover of 7 Million Euros, INARNBEL employs 170 people and its business model is based in bringing together both concepts: Its own brand represents 35% of the total company's income, together with production for private label (65%). Today INARBEL is present in more than 20 countries and its CEO, Mr. José Armindo, states that the key factor for its development as an SME was internationalization - exports. *"There is no other way of growing than conquering quota in foreign markets, with or without your own brand"*. According to Mr. José Armindo, for such kind of development strategy there are key aspects which are considered to be critical and that must be taken as priorities in terms of regional, national or European policy: *"For any SME access to credit is critical, now even more, namely when banks, the main source of credit for smaller companies, are becoming more risk averse"*. *"Another important instrument for those companies aiming to extend internationally its business through exports in foreign markets is credit insurance. "Credit insurance should be seen as an incentive for SME to face new challenges and to reduce the risk of new clients default"*. Regarding other critical aspects of its success story in terms of international expanding strategy, the company underlines that presence in international trade fairs with collective and harmonized stands, under a national brand strategy, has a positive influence on results.

**Fernando Valente** is an SME company, warp and weft knitted manufacturer with 40 employees and a global turnover of 5.5 Million Euros. The company is active since 1977 and currently is exporting 70% of its production, mostly to the Spanish market. Fernando Valente's products are both for technical applications (automotive sector) in the case of warp knitting and for the fashion industry, in the case of weft knitting. This "mixed" business approach, between technical and fashion, together with being a relatively young and small company, within the textile production sector that is normally dominated by bigger organizations makes this company into an interesting case to look at. Mrs. Fernanda Valente, from the second generation of the Valente's family in the business, is the CEO of the company and she believes that the most important strength of the Textile & Clothing sector in NP region is still having an integrated value chain with all kind of companies and services, that makes possible to develop and produce within the region any kind of product. She believes in the future of this sector in NP and in Europe, as long as present challenges can be overcome.

When asked about the major failed transformations or lock-ins that the T&C cluster could not overcome she points to two major facts: *"The company's culture for cooperation towards developing new business and exploiting new markets, has not evolved as it was supposed and expected. Despite all the pressure arising from the opening of the markets to China, we have not been able to operate a real change in mindset in terms of managerial culture. At the same time we have lost too much time trying to compete with the Chinese, instead of moving sooner and faster to*

more specialized and technical products/markets. For some companies, that decision came too late and the only option was closing down". When looking at present barriers and constraints for business development, Mrs. Valente states: "The scarcity of financial resources within the bank system making capital less available for the economy is asphyxiating the companies". Regarding business environment Mrs. Valente, states that one of the major constraints to be solved in Europe is reciprocity in market access in countries like China, Turkey or India. "Europe is becoming an excellent place for others to live and produce, but not for Europeans". "If you are producing in Europe you have to comply with a huge set of requirements regarding labor, product and environmental legislation, while at the same time there is a lack of control of products imported from third countries". Regarding positive changes in the sector or best practices available, Mrs. Valente highlights the support provided to SMEs by ASM-Associação Selectiva Moda in order to access new international markets, through the collective presence in the "From Portugal" Stand. Without this project, it would be very difficult for the company to make the first approach to so many different new markets.

**PAZ RODRIGUEZ** is a Spanish SME located in Vigo, producing children wear under its own brand, with a global turnover of 4,5 Million Euros and employing approximately 60 people. 80% of its production is for the Spanish market, namely for major retailers or for small multi-brand shops while the remaining 20% is exported to international markets like Portugal, France and Italy. The company supplies both knitted and fabric based garments, but only knitting fabrics are produced within the Vigo plant. Regarding clothing manufacturing, 50% is produced within the company and 50% is subcontracted locally, either in North Portugal, or in Vigo to small manufacturers. All the design process is done within the company and all the designers are from local fashion schools. Mr. Alvaro Toubes is the Manager Director of the company that is in the Paz family since 1941 and is presently in the second generation. When we asked Mr. Toubes about the major constraints or barriers for the company development within the region, he points out the difficulty to be competitive when all production is done locally. – " We have decided not to produce in China and therefore it is becoming more difficult to be competitive with the present cost of local manufacturing. Therefore our attention has gone to process managing and control, towards an improvement in productivity and competitiveness". Regarding issues like access to finance or credit insurance, Mr. Toubes claims that financing is not a problem for the company that generates enough resources to finance the day by day business. Access to credit insurance is now easier, but has become so expensive that sometimes the company takes the risk of doing business without credit insurance.

PAZ RODRIGUEZ have launched an international contest for young designers, in cooperation with Spanish and other European fashion schools around Europe. This initiative aims to support the starting career of young designers, helping them to become known within the business by integrating the winning designs into the company collection worldwide and giving the appropriate visibility to the designer.

When we asked about the cluster dynamic of the region Mr. Toubes says that the company has never felt the lack of any kind of service or support infrastructure and that most of its demands can be easily met locally. He has even been cooperating with a Portuguese dyeing & finishing company, towards new process and products. He highlights the role of the Local Association in aspects like promoting internationalization or actively instigating companies to innovate and to explore new markets. Regarding the company strategy, it goes towards establishing its own retail shops, starting in the Spanish market. About the sector lock-ins or major changes that are not being achieved, he highlights a certain difficulty in having a higher level of cooperation between companies, stating that SMEs are still too much individualists.

**Mr. Fernando Trebolle** is a former member of the administration board of Adolfo Dominguez and presently is the owner of a consulting company (Fat Old Sun) which is supporting the internationalization process of several

important clothing and fashion companies from Galicia. According to Mr. Trebolle the small multi brand retail shops are losing ground to the major brand retailers, namely in the big cities and in most capitals, leaving only room for a multi-brand concept in very small cities or in rural areas. This could mean a serious problem for those companies in Galicia, whose critical size is not sufficiently big to develop a strategy towards the set up of its own distribution and retail chain. On the other side, the sector in Galicia is too much fragmented, which makes it even more difficult to find companies of a certain size that can evolve to business models with a stronger position in retail and distribution. According to Mr. Trebolle, the Portuguese side of the Euroregion (NPG) is better prepared for the upcoming period, since it still has a complete production value chain while in Galicia production capacity has been significantly reduced in favour of more retail oriented strategies. Mr. Trebolle, states: "In terms of strategic thinking for the future, the proximity between Galicia and Portugal could play even a more important role than today, as long as the necessary adjustments to the new reality of shorter and simpler value chain can be implemented by the companies". Also according to Mr. Trebolle, the exporting profile and figures from North Portugal and From Galicia cannot be compared, since their business model and distribution channels are completely different.

#### 5.2.4. SWOT ANALISYS

Table 8: SWOT analysis of Galicia T/C Sector

Strengths	Weakness
<ul style="list-style-type: none"> <li>• Production expertise and know how</li> <li>• Service and product quality</li> <li>• Complete structured value chain</li> <li>• Product portfolio diversity (Fashion, technical, home-textiles, etc)</li> <li>• Exporting profile</li> </ul>	<ul style="list-style-type: none"> <li>• Less experience and critical mass in retail and Brand managing</li> <li>• Weak organizational standards</li> <li>• Small size of the domestic market</li> <li>• Some dependency of smaller firms on INDITEX</li> <li>• Lack of horizontal cooperation culture</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Return in Europe of big retail brands from Chinese Markets for production sourcing</li> <li>• Increase in value and quality standard of Zara's product</li> <li>• New Extra EU markets (Brazil, Russia and USA)</li> <li>• Niche markets for technical or innovative differentiated products</li> </ul>	<ul style="list-style-type: none"> <li>• Increase of energy costs and production costs</li> <li>• Sector's image and consequently difficulty to attract "young blood"</li> <li>• Excessive legislation and production constrains in the EU market</li> </ul>

<b>Strengths</b>	<b>Weakness</b>
<ul style="list-style-type: none"> <li>• Commercial experience and know how</li> <li>• Privileged access to Spanish speaking markets</li> <li>• Experience and critical mass in retail and brand managing</li> <li>• Dimension of the internal market</li> <li>• Positive image of “Moda Gallega” within the global market</li> </ul>	<ul style="list-style-type: none"> <li>• Shrinking capacity in production</li> <li>• Considerable dependency in the internal market</li> <li>• Lower diversity of the product portfolio</li> <li>• Excessive dependency of smaller firms on INDITEX group</li> <li>• Lack of horizontal cooperation culture</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Extra EU markets (Spanish speaking Markets)</li> <li>• Potential growing of Exports to the EU Markets</li> <li>• Niche market or specialized retail strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Increase of energy costs and production costs</li> <li>• Excessive legislation and production constrains in the EU market</li> <li>• High concentration of retail/distribution within a few key players</li> </ul>

### 5.3 CONCLUSIONS AND SUGGESTIONS FOR PUBLIC SUPPORT INITIATIVES

Besides the strong presence of the textile & clothing industry in NP and Galicia, both regions are in evidence for their social dimension, namely for a relatively significant population of 6,5 million inhabitants, representing more than 11,3% of the Iberian peninsula population. In addition the economic dimension of the NP and Galicia regions should be highlighted, since together they represent more than 8% of the Iberian Peninsula GDP.

From all the information collected during the field work and interviews it is clear that one of the most common problems that companies are facing in the short term are related to a difficult access to credit and to credit insurance. This scarcity of financial resources, normally available through the banking system, is creating additional difficulties for companies to run their operations. Even in those cases where the business generates enough resources to fund the day by day needs, credit insurance has become more difficult to obtain and, recently, more expensive and this affects mainly SMEs.

The influence of the INDITEX group in the regions is very important, but at the same time less problematic for those companies with a solid experience and an important amount of direct exports to international markets. However, the cluster approach, with a combination of different phases of the production chain, makes the region very interesting for the kind of operation normally run by major retailers like INDITEX, which can find within the region every kind of production offer and supporting services to fully complete their orders.

The strategy that is being implemented by companies in the region is clearly different, as expected, between textiles and clothing. Most clothing manufacturing companies have followed a pattern of climbing in the value chain by offering to their clients more than just production capacity. Creativity and design have become an important asset in order to provide the client (brand owner) with a complete product development and production solution integrated approach. This is more common in Northern Portugal, where normally this strategy (private label offer) still coexists with the strategy of creating, producing and marketing an own brands. This is clearly a movement from a supplier position to a business partner position. In Galicia, the own brand strategy oriented to multi-brand retail shops, operating in the domestic market, still is the dominant model, but facing a clear slowdown

in consumption and some dependency in the domestic market. Textiles production strategies focused on product differentiation through innovation and added-value services are concentrating companies' development efforts. Textile companies within the NPG region are increasingly incorporating innovative fibres, finishing and functionalities in the product, while at the same time higher attention is paid to service (order tracking, sampling, delivery time, etc.) in order to conquer costumers' loyalty. At the same time, approaches to new application markets, from completely different segments than traditional fashion clothing, like the automotive industry or the PPE manufacturing, are becoming more important for the textile industry.

The major challenge for the sector in the NPG region is to increase exports. Either for the companies based in Northern Portugal or for the companies based in Galicia, increasing exports is essential and is normally at the top of the business and industrial Associations' strategic agendas for the sector. For SMEs, that kind of supporting services or internationalization projects promoted by those organizations, aiming to facilitate the first contact with different new markets and allowing those small companies to have a stand or an exhibition area within a common and wider area, is considered to be a valuable contribution for the development of the companies' internationalization strategies.

Reciprocity in market access and accomplishment for product regulation and environmental legislation when it comes to imported textile & clothing products are still hot issues and have been often brought to discussion by most of the companies and associations that were interviewed. Brasil, Turkey and China have been mentioned as cases requiring more attention from National and European authorities.

Despite some recovery in the last year, the T&C sector still suffers from an image deficit within the region. This "bad" image has a negative effect when it comes to attract young professionals or students to the sector and this is critical for a business where creativity and new product development, has such an importance. Even when some technological schools, like ETT, are branding their courses with a 100% employability after a two and half year course, it is still difficult to recruit students for such courses, due to a poor image of the sector.

Regarding the cluster structure it is clear that the companies working in the T&C sector can easily find and access within the region, every kind of supporting services or business partners they need to operate. The missing part is clearly the machinery construction sector that is not developed as it is in other European strong textile clusters. However and besides that missing link, there is still room for improvement in what cooperation (beyond just business relations) is concerned. The exchange of human resources, for instance, between schools and companies from both regions could be improved and could lead to mutual benefits. At the same time the design of a common internationalization strategy for Spanish and Portuguese language markets is something that most probably can be structured by local organizations, within a common internationalizations plan developed under the EUROCLUSTEX project that is positively marketing the cluster as one.

Regarding important issues for policy intervention and support, in the line of the above major conclusions, the following topics can be considered as strategically relevant for the sector development in the NPG Region:

- Improved access to finance by SMEs
- Internationalization promotion and improved market access outside the EU
- harmonized regulations between EU made products and imports from third country markets
- Creativity and Innovation support
- Improvement of Sector's Image through targeted PR campaigns
- Improved structural mobility (human resources)

## CONCLUSIONS AND SUGGESTIONS FOR POLICY INTERVENTIONS

### SMEs

Taking into consideration only the size parameter, SMEs are generally considered an homogeneous segment of industry. However the findings of this Task indicate that this very large part of the T/C industry, comprising about 130.000 enterprises in the 27 countries of the European Union, encompasses an extremely wide array of different situations among firms that generate a corresponding diversity in needs, opportunities and business potential. This diversity may reduce the effectiveness of support addressed to all SMEs, since what may be effective for a share of them might be ineffective for those that have different characteristics.

In our opinion, a more refined segmentation is needed to design targeted and effective SMEs support policies. Starting from this standpoint, the Task team analysed this sector trying, first of all, to identify more significant criteria for further segmentation within the SMEs universe with the purpose to devise new tools for support policies. The numerous face-to-face interviews and the discussions during the round tables with SMEs entrepreneurs and T/C local experts indicated that *entrepreneurship* may be a meaningful dimension to take into consideration in providing inputs for sectoral policy. Although *entrepreneurship* is difficult to define and to measure we identified two extreme situations that can set the limits of the SMEs sector.

At one end of *entrepreneurship* are SMEs that are basic subcontractors, the so called Cut and Make firms (CM subcontractors) when it comes to clothing making that manufacture according to strict specifications of the buyer. The textile industry also has small companies performing e.g. warp preparation or specific finishing activities for a limited number of local clients.

These enterprises are almost completely subordinated to other enterprises and the range of activities on which they have full control is very limited. In practice, these firms simply substitute the workshop of the buyer; they sell workforce capacity. On the opposite end, are SMBs – Small and Medium Brands; enterprises that are able to fully develop their business idea, are in full control of all the managerial levers and are independent in the decision making process. They are small enterprises only because of size, not in terms of complexity and articulation. Very often, possibly always, these firms are specialized or leader in a market niche.

Between these two extremes there is a great variety of SMEs that combine characteristics of both. This segmentation is meaningful because CM subcontractors and SMBs have different key competitive factors and therefore different needs. In general terms subcontractors' key success factor is efficiency, i.e. the ability to use the lowest amount of inputs/resources to obtain a specific output, while for SMBs the key success factor is, first of all, effectiveness, i.e. the ability to achieve new or further goals, and efficiency is a constrain. Efficiency requires skilled and motivated workers and strict cost control procedures. Needs are focused on the workforce and required supports are related to matters such as vocational training, labour code, labour flexibility and assistance for cost reduction actions and similar. Effectiveness is supported by R&D, innovation (including innovation in organization and marketing), credit guarantee schemes, marketing support etc. Two very different sets of needs that are overlooked by a size segmentation only.

Herebelow is a more detailed analysis of these SMEs segments.

### **CM-T Subcontractors.**

CM (Cut and Make) subcontractors represent the first level of the T/C business. This segment is often composed of micro or very small firms that are, de facto, external workshops of larger enterprises. They offer production capacity and manufacturing skills and competencies. Their business is actually controlled by buyers who impose prices, quantities, products and provide inputs such as fabrics. The decision capacity of these SMEs entrepreneurs is limited and for them the possibility to start a capital accumulation process is almost non-existent. They find themselves in the subcontractor's trap.

Though the situation of these firms at individual level is very constrained, the CM-T subcontractors aggregate may be crucial because they provide production flexibility and capacity elasticity to the entire EU T/C industry. Large EU companies such as retailers and fashion brands, can better adapt to the shifts of final demand and can react to the threats of external global competitors by using the lever of subcontracting. In other words subcontractors have a key systemic role.

In many countries, and in this task in Northern France and Flanders small subcontractors have all but disappeared. In clothing they have closed because of delocalisation of production, in textile they have disappeared and are often substituted by integration in larger firms. When it comes to knitting and clothing, the disappearance of small manufacturers also takes the seed-bed away for designers and small brands to take off. Northern France is hence no longer a good environment for creative start ups. They prefer to shift to Paris that has a better environment.

Unfortunately, what are advantages for the whole T/C industry, not necessarily are advantages for the individual small firms. CM subcontractors sell a commodity and, like all commodities, price is the key competitive factor; in this case price is determined almost completely by labour cost and productivity. The existing fierce competition among subcontractors of the same cluster, due to very low entry barriers, combined with the competition of other foreign locations made possible by liberalization and globalization, as well as the potential presence of often uncontrolled, imported products exert a strong pressure on price. As a result prices are close to marginal costs and sometimes they do not cover real total costs.

Though in many legislations the labour code for micro and small enterprises allows some flexibility and lighter tax/social burdens in comparison to larger manufacturers, CM subcontractors are always at risk to be pushed out of the market due to their razor-thin margins; in particular when they have to face the unfair competition of T/C unregulated producers in the EU or competition from neighbouring non-EU countries. From a quantitative standpoint, including number of enterprises and total employment, CM-T subcontractors are not marginal in the T/C sector and, even more important, this segment is rather important in some regions that, in some cases, present disadvantaged economic conditions. Eastern Slovakia, bordering with Ukraine, and South Bulgaria, characterised by high internal competition, proximity of T/C Turkish producers and low-cost FYROM, Albania and Serbia producers, are two relevant examples of this kind.

Even where unfair competition and illegal practices are not widespread or adjacent, the life of CM subcontractors is very difficult because of their negligible negotiating power versus large buyers. This is the case of Galicia where a large number of enterprises are depending on the Inditex Group; this is the likely reason of a significantly smaller average size of enterprises in Galicia compared to adjacent North Portugal. When subcontractors can add the T of



trimmings to the basic phases of cut (C) and make (M), they enrich the quality of services provided and that may bring slightly better prices and profitability.

The needs of CM-T subcontractors that were identified during this study are:

- Access to new and young workers so to ensure renovation of the workforce,
- Availability of skilled workers with, at least, basic production and manufacturing abilities,
- Flexibility within a legal labour code,
- Lesser burdens of taxation and social security for workers in order to adapt taxation and charges on wages to the real value added generated,
- Support and training for cost control and management,
- Training for sourcing skills (fabrics and trimmings),
- Finance supporting schemes for equipment and machinery (credit guarantee, collaterals etc.) finalized to improve productivity,
- credit finance for working capital to cover production cycle,
- Transparent and equal market and competitive conditions so to eliminate or lessen the nasty impact of illegal practises,

When CM-T subcontractors succeed to escape from the subcontractor's trap (price close to marginal cost, no capital accumulation, no development), they can start a development path that leads to quantitative growth and better quality of their services.

#### **Evolved subcontractors (co-contractors).**

Though their business model is still limited to manufacturing, these subcontractors are characterized by a very high quality of their services and outputs made up of complex products such as jackets, coats, women fashion dresses. They are not merely providing workforce but delivering industrial services to their customers; they were able to become industrial partners for customized services rather than just subcontractors. They have remarkable competencies also in many manufacturing-related areas such as: production programming, CAD/CAM, quality control, human resources motivation and incentives, technology and technical innovation, cost control, organization and efficiency practices.

Proactive cooperation with customers, combined with geographical proximity on a global scale which allows simple logistics, enhances their competitiveness compared to overseas outsourcing areas such as China and other Far East producers. European fashion brands and/or large retailers (private labels) are their typical customers. Despite a restricted business scope, a strong entrepreneurial attitude is necessary and it is often provided by an alliance/partnership with a foreign company. Personal relations skills are therefore also very important features.

The combination of large customers and good entrepreneurship leads to significant growth, and we also came across firms whose current size is larger than the EU accepted SME definition but whose condition of subcontractor is a limit to their free decision making. Evolved subcontractors have almost disappeared in Northern France and Flanders, except for very specialized segments where specific equipment and knowledge is required. Co-contractors are present in Northern Greece, Northern Portugal and Prato. They share some of the needs of the CM-T subcontractors, but they are ultimately much more concerned about efficiency, productivity, organization, cost control, energy savings, sustainability and quality or, in summary, in all issues regarding technical and organizational innovation.

### **Hybrid businesses including both subcontracting and own production**

Often evolved subcontractors, both large or small (in terms of employment) start a parallel, own production usually for the domestic market and/or for the same retailer to whom they provide the private label production. The two parallel businesses, though very similar in output (for example apparel), are not comparable in terms of entrepreneurial and management skills since successful management of a own production (collection) requires additional competencies and skills.

Ozek/Egotex (Eastern Slovakia), Gemor Fashion (Eastern Slovakia), Kalestesia (Northern Greece), Pirin (Southern Bulgaria) and Inarbel (Northern Portugal) are examples of hybrid business.

The complexity of running two parallel businesses is reflected by the needs of these companies which include, in addition to the typical key success factors of subcontractors (efficiency, cost control, workforce management), the key success factors of own-production: product design, product management, marketing and commercial skills. Also finance may become very critical due to a significant increase of the working capital required to finance the supply chain cycle. Support of a foreign partner does not eliminate this need. Finally, networking is a key factor both locally, because these companies generally use local workshops, and internationally, for market and marketing development.

### **Own-Product Enterprises and SMBs (Small and Medium Brands)**

Successful, own-product enterprises that maintain a small or medium size are specialized in a specific segment and, when very successful, they can be considered brands in their market. During the field research we came across small brands which were specialized in specific products/ applications or in limited geographical areas (or both). Generally, long established T/C clusters host specialized SMEs. Prato for fashion yarns and fabrics, Flanders/Pas de Calais for carpets, technical textiles and lace. Due to the restructuring and general downsizing of the T/C sector, the surviving and healthy companies in these clusters are those better specialized/equipped to operate in the global market. And, since carpet has a very large market potential, there are no longer SMEs in the Flanders/Pas de Calais area but two hyper-specialized companies: Bic and Creatuft.

The needs of SMBs are not related to improved entrepreneurship or competencies, of which they are generally well endowed, but are concerned with protecting the basis of their specialization: creativity and innovation (e.g. product design, technical performances). An additional problem that may recur for SMBs is the barrier to access those factors that require a minimum threshold for their effective utilization, in particular research programmes, technical innovation, global communication. There is disproportion between the actual resources that SMBs can employ and the resources needed to be effective in these fields. And also when resources are available, the financial risk is often overwhelming for SMBs. SMBs should be involved in large innovation programs (like the EU Framework Programmes). Needs frequently highlighted are:

- fair market conditions: reciprocity of rules in the global market is a must for specialized SMEs operating internationally,
- better protection of intellectual property rights and intangible assets, including design and brands,
- traceability of products in order to ensure quality, safety and sustainability,
- support for innovation in fabrics/materials,
- credit guarantee support, including especially export credit guarantee,
- risk sharing or risk smoothing for innovation.

The T/C industry in Galicia and Northern Greece presents a lesser degree of specialization due to their focus on the apparel segment. In Galicia SMEs belonging to the “Moda Gallega” concept have invested in their own distribution and retail space, which is the most valuable asset in the fashion business today. In Greece – though not in the Thessaloniki area we have been directly investigating - during the last decade, the quest for specialization has led to the birth of several local brands in the fashion segment; companies such as Attrattivo, Minerva and Oxford Company have developed, so far successful, Greek fashion brands and businesses that integrate production and distribution - product and store brand - by locally replicating what very large fashion companies have done at global level (e.g. Zara, H&M, Benetton and the top-end fashion brands). A similar business idea is being implemented by Sarti Faliero in Prato who combines two specializations: one for product - only fashion scarves of high-quality materials- and one for marketing – own-brand outlets in Italy.

Own-product SMEs of a lesser degree of specialization present needs which include fair competitive conditions, since they fall easily under the attack of imported goods, and support for management and strategy.

Summarising our findings and conclusions for SMEs:

- South Bulgaria and Galicia are mostly characterized by CM-T subcontractors; South Bulgaria is largely a subcontractors’ cluster with many SMEs serving another largely subcontractors’ cluster in Northern Greece.
- Northern Greece and Northern Portugal are in a medium stage of transformation and many local own-product SMEs are still at a low/medium degree of specialization. The two regions also host many hybrid businesses. Northern Greece has the advantage of geographical proximity with possible delocalization areas in South Bulgaria, FYROM, Albania. Northern Portugal has a significant number of own-product enterprises and SM Brands.
- Eastern Slovakia is characterized by few, large, evolved subcontractors to leading European businesses that use a number of small/micro local workshops to ensure capacity flexibility. Low-cost, next-door Ukraine is competing with such local workshop but due to its high instability and unsure rule of law, only few Eastern Slovakia companies have de-localised production there. In Eastern Slovakia there are only few SMEs and all of them have a significant degree of specialization.
- Prato, Flanders/Nord-Pas de Calais present high level of entrepreneurship and specialization. While the latter SMEs were quick to strengthen the technical/functional performance of their output, Prato is still very much focused on the fashion business and only few examples of technical textiles have emerged in recent years. In Nord-Pas de Calais/Flanders part of the industry has scaled up losing its SME status, the other part has retrenched in areas of high technical specialization such as lace, jacquard home textiles and technical textiles.

## CLUSTERS

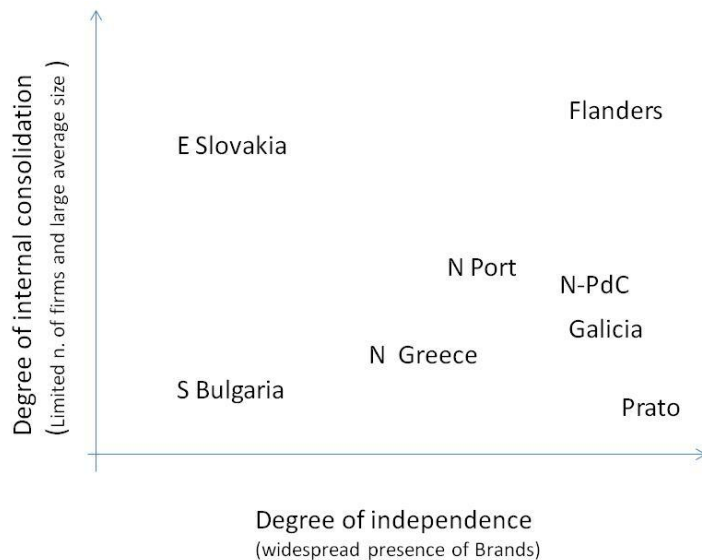
A cluster may be considered more or less independent according to the relative weight of own-product SMEs and SMBs in comparison to subcontractors SMEs. Independence of a cluster, which is an expression of the level of entrepreneurship of the area, is an important factor especially in turbulent times when subcontractors, being the flexible part of the industry, are the first to face downsizing and closures. For this reason the degree of independence of a cluster is a significant factor for cluster support measures. A second factor which should be taken into consideration is the degree of consolidation within the cluster. Consolidation is related to the size factor and it occurs when the number of companies is limited and their average size is significant, i.e. numerous medium enterprises instead of many small or micro.

The T/C industry in Flanders/Nord-Pas de Calais has greatly reduced the number of SMEs, which are not anymore the dominant feature of the two regions. Particularly in Flanders consolidation is well advanced. On the other hand, the Prato area is still characterized by a very large number of SMEs either because innovation in creativity and design requires mostly individualistic conditions or because the consolidation process finds an adverse legal (Italian) and cultural (local) environment. In Presov the consolidation process is well developed because the T/C industry is characterized by large, evolved subcontractors and hybrid businesses; in South Bulgaria the vast majority of subcontractors are SMEs.

According to the information collected for outlining the characterization of clusters we can roughly position each cluster in a chart with the following two dimensions:

- degree of consolidation
- degree of independence

Figure 11: Clusters' degree of consolidation/independence



A cluster positioned in the low-right quadrant of the diagram (Prato) is characterized by a large population of SMEs and by developed entrepreneurship. Prato is very similar to a self organizing system that can hardly be directed by a single "authority" such as cluster management or a leading company or a representative industry association because there are too many independent decision makers. Also Flanders T/C industry has well developed entrepreneurship but the local cluster is composed by few medium to large companies; in this case decision makers are few and the cluster can be coordinated more easily (similarly to corporations) by a cluster management or cooperation body among cluster's members. The T/C cluster in Eastern Slovakia is characterized by few actors that are relatively independent decision makers while Southern Bulgaria has many actors all with limited decision power over their enterprises. The other four clusters have positions that are a mix of the four previous clear cut cases.

The above clusters' classification provides suggestions for modelling cluster dynamics: from low independence/low consolidation to high independence/high consolidation. Therefore public initiatives intended to support cluster development can be designed according to the characteristics of their development stage.

## **SMEs and Supporting Services.**

According to the findings of this Task field research, SMEs access to supporting services is broadly correlated to the stage of development of the cluster. Clusters characterized by a high degree of external independence such as Prato, Flanders, Nord Pas-de-Calais, North Portugal, Galicia still register an intense flow of relations with local service centres. Access, use and relevance all depend on the quality of service centres and their coherence with both established and emerging needs of local SMEs. While the degree of access might be satisfactory in terms of quantity, the kind of services and assistance required, and valued as useful by SMEs, greatly varies from cluster to cluster.

In particular, key service centres in Flanders and Nord Pas de Calais are those focussed on R&D and innovation because local enterprises are in an advanced development phase and highly specialized in technical or functional textiles. In Prato, due to the high importance given to “institutional” issues the local industrial association Unione Industriale di Prato and the Chamber of Commerce and Industry are the key entities to which all SMEs refer to because these two entities are very active in lobbying local, national and European authorities.

Among the analyzed regions, North Portugal possibly has the centre with the widest scope of services to SMEs. Citeve (located in Famalicao) can assist SMEs in R&D, innovation, training, strategy/management and other institutional matters. Local SMEs characterised by a wide range of needs due to their different degree of entrepreneurship (from subcontractors to small and medium specialized brands) and size, frequently refer to the centre due to the quality of the services provided.

The weakening of the T/C sector in Northern Greece is reflected in a fading relations between service centres and firms. This is particularly true for centres providing technical support, of which the region used to be rich, while the role of the local T/C industry association (SEPEE) is still very strong in lobbying, networking, market development support. To weak clusters correspond weak access to services centres. There are no T/C-specific service centres in South Bulgaria nor in the whole countries and SMEs in the region refer to T/C industry associations based in Sofia mainly for networking and lobbying national institutions but since there are several associations, their negotiating strength is weakened as well as their ability to represent the needs of member companies. In Presov /Eastern Slovakia there is neither a sector-specific service centre nor a T/C industry association and even the local EC-funded SMEs supporting centre has no significant relationships with the T/C sector.

As for clusters and access/utilization of their services by SMEs it should be noted that many T/C clusters developed their structure during the 1980s. Facilities such as R&D or quality centres, incubators, trade fairs and associative bodies such as consortia, were designed to maximise all opportunities generated by physical proximity in an almost homogeneous competitive environment Western European countries. Subsequently internet and globalization quickly influenced the development of a new adverse scenario where physical proximity, and the externalities and the cooperative competition among SMEs that it generated, decreased in importance. The first decade of the 2000 witnessed a general decline of T/C clusters as economic development assets and the many attempts by clusters to redesign themselves in the new scenario are still under way.

The findings of the field research indicate that in many cases there is a discrepancy between the services that these structures provide and the emerging needs of the T/C SMEs. The most developed clusters such as North Portugal, Prato and Flanders, are striving to rethink themselves in order to regain the central position in the T/C industry they held in the past. Experts, managers, entrepreneurs, representatives of associations are still searching for a new cluster model for the new scenario.

The above considerations support the conclusion that diversity is a major characteristic of the SMEs sector, especially for those SMEs which are not CMT subcontractors, as well as for clusters. This high degree of diversity makes it difficult to identify good cases or best practices that can be easily duplicated. Many local (for clusters) or individual (for firms) features are involved in the success or failure of strategies, actions and/or operational behaviours. When considering SMEs we have to bear in mind that human capital is their key asset, the more so since they are almost always family businesses. Human capital directly shapes their businesses and persons have different sets of values, competencies, energies, wills, attitudes. For example: the current success of Sarti Faliero in the development of an SMB in the accessories business is mainly due to the fortunate encounter of a grandfather, extremely experienced in carded technology, with a niece who has outstanding attitude for design, sense of beauty combined with education and skills in marketing and communication. This can only be a good example, not a best practice. We came across a similar case with Atak (Eastern Slovakia); a company in the sportswear business where the two sons of the founder play in the local basket team and they appear to be natural promoter of the brand.

The large diversity of cases arising both from the characteristics of the T/C sector with its many opportunities of differentiations in businesses and products, as well as from the personal features of the entrepreneur and its family, requires a better, more effective segmentation of the T/C sector SMEs. The effort of segmentation done by this Task may help to design public support interventions for companies that share similar conditions. In particular this approach may be beneficial to subcontractors, the segment with fewer opportunities of differentiation and which is also the weakest in the European T/C SMEs industry.

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## ANNEX II: ROUNDTABLES AND INTERVIEWS

For the purpose of this study on-field activities were carried out, namely:

In Prato: 2 roundtables attended by entrepreneurs of local T/C companies, several meetings with the Deputy Director and the research Centre Team of Unione Industriali di Prato, meeting with Director of Association of Craft Companies of Prato. In details:

Prato 06-06-2011

N.	Name (Person)	Name of Company/Organization
	Giampiero Lombardi	Assotex srl (wool fabrics)
	Stefano Borsini	IGEA spa (Knitting yarns)
	Roberto Saccenti	Faisa (Fabrics)
	Sandro Ciardi	Ultra (Fabrics)
	Franco Bini	LDS Lineaessee (fabrics and spread coating)
	Livi Giampiero	Ecafil spa (knitting yarns)

Prato 13-06-2011

N.	Name (Person)	Name of Company/Organization
	Marco Gramigni	Lanificio Caverni e Gramigli (wool and linen fabrics)
	Stefano Nesi	Linsieme filati (fabrics and yarns)
	Marco Benespira	Filati BE.MI.VA (cashmere and viscose yarns and fabrics)
	Alessandro Benelli	Linea Tessile Italiana (fabrics)
	Roberto Sarti	Lanfaliere Sarti (scarves and fabrics)
	Giovanni Moschini	Unione Industriale Pratese (Deputy director)
	Enrico Mongatti	Unione Industriale Pratese (Research Centre)

In Bulgaria: 2 roundtables, one in Sofia and 1 in Blagoevgrad, attended by entrepreneurs of local T/C SMEs, as well as by representatives of Employers Associations, of Textile and Clothing Industrial associations, trade Unions, Technical University.

Sofia 31-05-2011

N.	Name (Person)	Name of Company/Organization
1	Veselin Slavchev	Veni Style – Ltd
2	Radina Bankova	Kis fashion, BAPIOT Board Member
3	Svetla Nikolova	Textil Logistik Bulgarien, BAPIOT Board Member
4	Ivan Zahariev	Director, Confederation of Employers and Industrialists in Bulgaria
5	Valeria Jekova	President, BAPIOT
6	Beltram Rollmann	Pirin Tex, Member of the Board of Euratex, responsible for T/C in New Member States
7	Rosen Pashov	Integrity Consulting
8	Milena Pachevska	Ministry of Economy, Energy, Tourism
9	Mariana Manolova	Director, BAPIOT
10	Nikolay Dobrev	Amann Bulgaria Yarns Thread, Accessories and trimmings, Technical textiles, BAPIOT Board Member
11	Marin Pavlov	Intertex 2000 Producer of lady's and men's pullovers and sweaters

Blagoevgrad 1-06-2011

N.	Name (Person)	Name of Company/Organization
1	Christos Kafandaris	Greek Style
2	Hristo Bardarov,	Dynamic Tex Ltd
3	Nikolay Todorov ,	Nitex Ltd, Company for passementerie

4	Emilia Mangyova,	Milia Jo Ltd
5	Ilyia Petrov,	Trade Union “Nov Sviat”:
6	Volodiya Stoyanov,	Piros Ltd
7	Yordan Belovodski	BOTO Textile and Clothes Branch Organisation of Southwest Bulgaria
8	Snejina Antonova	Head of Textile Equipment Department Southwestern University Blagoevgrad
9	Todorka Ficheva	Lecturer, Textile Equipment Department Southwestern University Blagoevgrad
10	Veselin Bogov	Visitex
11	Georgi Bashliev	JPPK AD
12	Angel Dimitrov	Ledian
13	Viktor Shamov	Elia 7
14	Iordanka Slatinska	Milena AD
15	Angelika Lefagenova	Teks-Teknika
16	Vasil Kutinov	ET Draga

In Northern Greece: 1 roundtable in Thessaloniki attended by representatives of local SMEs, cluster service companies, research centres, industrial associations. Meetings were held with representatives of the Technological Educational Institute of Thessaloniki, the research centre CLOTEFI, the Director of **the** Hellenic Fashion Industry Association. In details:

Thessaloniki 2-06 2011

N.	Name (Person)	Name of Company/Organization
1	Tsamados Konstantinos	VAMP SA
2	Ampatzi Anastasia	Badoo SA
3	Sidiropoulou Sotiria	Pretto SA
4	Kisoglou Alexandros	Pretto SA
5	Koutsou Anastasia	Polytron
6	Matas Eleftherios	Makotex SA
7	Dragoumi Elisavet	Minerva SA



8	Pelteki Fani	Computer life SA
9	Crysopoulous Charilaos	Computer life SA
10	Katsiavos George	Europaika Plektiria SA
11	Kiridis Panos	VIOSTAMP SA
12	Charalampos Ozounidis	KALESTESIA SA
13	Dagkounakis Michalis	KALESTESIA SA
14	Christos Tsiolias	Oxford Company SA
15	Lavrentiadis John	Lavrentiadis SA
16	Goutas John	VIELTA SA
17	Isabella Varvaressou	Varvaressos SA
18	Alexandros Apostolidis	Colora SA
19	Cecile Varvaressou	Varvaressos SA
20	Chrisanthopoulos John	Vielta sa
21	Kalatzis Andreas	CLOTEFI SA
22	Adrias John	Hellenic Fabrics SA
23	Bikos Vasilis	Ergotyp
24	Afrodite Panaglotolidou	TEI THESS
25	Thanasis Mantikos	Fieratex SA
26	Karra Panagiota	SEPEE
27	Theofilos Aslanidis/Director	SEPEE

In Presov: 1 roundtable attended by representatives of T/C SMEs. Meetings were held in Presov with Director of Regional Advisory and Information Centre and lecturer at Technical University of Kosice. In details:

Presov 7-07-2011

N.	Name (Person)	Name of Company/Organization	Products
1	Josef Hreha	HELP JILANA	Technical textiles - Mensuits
2	Rastslav Tkac	RPIC Presov member of	Director

		Enterprise Europe Network	
3	Maria Radvanska	RPIC Presov,	Business support
4	Peter Bobak	ATAK – Owner and Director	Sportwear production and retail
5	Maria Skubanova	ATAK logistics	Sportwear production and retail
6	Bobak Ivan	Foreign sales development	Sportwear production and retail
7	Matus Murajda	Director Gemor fashion	Protective clothing and uniforms
8	Jan Vardestok	Muller Textiles Slovakia Customer services	Technical textiles
9	Robert Sabovok	Zekov a.s.	Ladieswear
10	Silvia Cossar	LC Management - Director	Mattresses and beddings
11	Michrina Jan	Ozekx Director	Mensuits
12	Marta Kollarova	Technical University of Kosice	

In Vigo, Galicia: project presentation and round table in Vigo at COINTEGA facilities on TEXVIGO, within the scope of a workshop on internationalization of textile & fashion companies organized by COINTEGA.

Vigo 28- 6 - 2011

N.	Name (Person)	Name of Company/Organization
1	Ricardo Aymerich Martínez	Marga Novas S.L (Clothing Manufacturer )
2	Jose Antonio Bahamonde Fernández	Mamás-Mamás S.L (Clothing )
3	Alfredo Bermudez de Castro Berbel	Naxxai Wear, S. L.(Knitting)
4	Valentín Camaño Miranda	Gonzabell S.L .(Textile/Knitting)
5	Salomé Carrera Rodríguez	Pili Carrera (Knitting/Children Fashion)
6	Leonardo Gabriel Chauca Sabroso	Sk- Selnova (Underwear)
7	Ana Isabel Eiriz Guerra	Confecciones Guerral S.A (Woman Fashion)
8	Florencio Fernández Martínez	Futura Línea Moda S.L (Woman Fashion)
9	Miguel Ángel Gómez Gómez	Euro-Gomca S.L (Shirts)
10	Carlos López Loureiro	Creaciones Foque S.L (Children Wear)

11	Sara Martínez Pérez	Sara Coleman (Woman Fashion)
12	Alejandro Pastor Portela Jelusich	Rotelpa S.A (Woman Fashion)
13	David Quinzán Roca	Trasordes S.L (Trading Company)
14	Álvaro Rodríguez Toubes Muniz	Creaciones Paz Rodríguez S.L (Children Wear)
14	Manuel Santos González	Olga Santoni S.L (Woman Fashion)
15	Maria Jesús Vázquez Gómez	Selmark (Underwear)

Individual Interviews carried out by CITEVE:

N.	Name (Person)	Name of Company/Position
1	Paulo Vaz	ATP/Secretary General (PT)
2	Álvaro Rodríguez Toubes Muniz	PAZ RODRIGUEZ/Managing Director (ES)
3	Alberto Rocha Guisande	COINTEGA/Secretary General (ES)
4	José Armindo	INARBEL/President of Board (PT)
5	Fernanda Valente	FERNANDO VALENTE/President of Board (PT)
6	Manuel Pinheiro	NGWEAR-TINAMAR/CEO (PT)
7	Fernando Trebolle	FAT OLD SON/Managing Director (ES)

Individual Interviews carried out by SAXION:

N.	Name (Person)	Name of Company/Position
	<i>France</i>	
1	Stephan Verin	UPTEx
2	Andre Beirnaert	UIT NORD
3	Clude Duhén	UIT NORD
4	Vladan Koncar	ENSAIT

5	Philippe Grimonprez	IFTH
6	Christophe Binetruy	Armines
7	Simon Hawkins	Univ. Lille
8	Nathalie Tranois	OSEO
9	Isabelle Zeller	Region Nord Pas de C.
10	Laurent Tuppin	TRP Charvet
11	Robert Blondel	Yann balguerie
12	ELISABETH LEMAHIEU	Lemahieu
13	Subrenat	AT TECTEXTIL
14	Xavier Thierry	Dylco
15	at Premiere Vision	Noyon
16	Franck Duhamel	Codentel
17	Bracq	at PV
18	Sophie Halette	at PV
19	Eric Dupont	Decathlon
20	Feutrie	Federico Italiano
21	Christian Mekerke	Safilin
	<i>Flanders</i>	
22	Chris de Roock	Fedustria
23	Jan Laperre	Centexbel
24	Marc van Parijs	Hogeschool Gent
25	Steeven Cleeren	Design Vlaanderen
26	Lieven de Waele	Textstream
27	Rudi Stevens	IWT
28	Josef de Coster	Texpress
29	Nico Roozen	Beaulieu
30	at TT	Galactic
31	at Domotex	Osta

32	at Domotex	Associated Weavers
33	at Domotex	Creatuft
34	at Domotex	Balta
35	at Domotex	BIC
36	Kirsten Rutten	Desso
37	Patrice v.d.Daele	Devan
38	Jean Luc Derycke	Utexbel
39	Willy Verstraete	Masureel
40	Daniel Colpaert	Liebaert
41	at PV	Libeco
42	at Domotex	Lano

## ANNEX I: MAPS OF REGIONES SURVEYED

### 1. Prato Province and surrounding areas



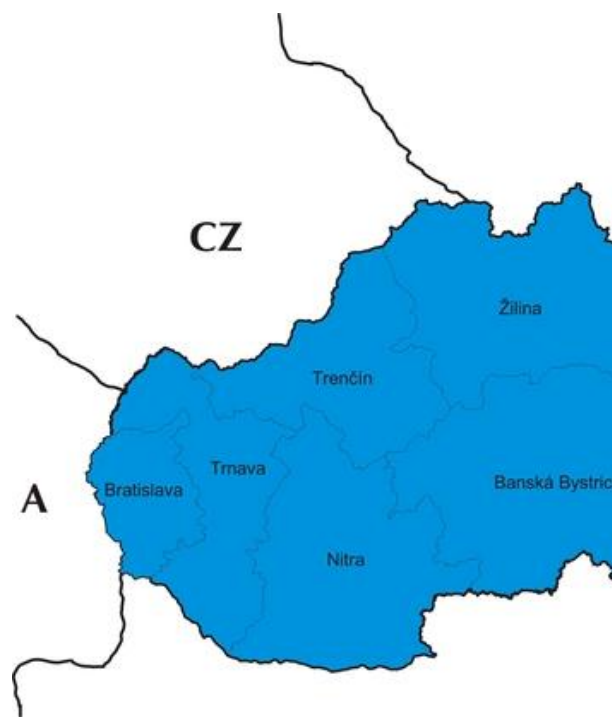
## 2. Northern Greece



## 2. South West Bulgaria



4. Eastern Slovakia



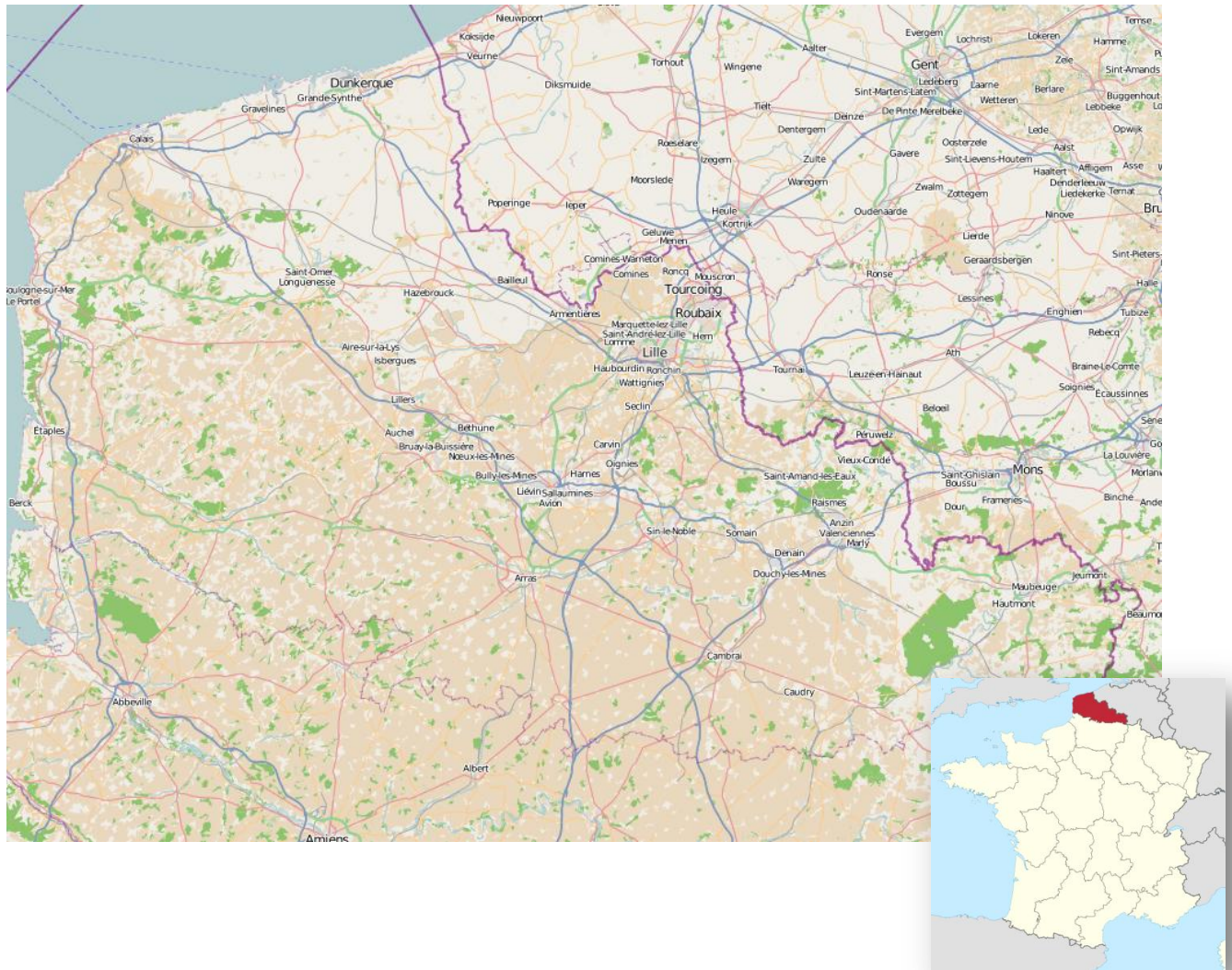
5. Galicia



## 6. North Portugal



## 7. Nord-Pas-de-Calais, FR



## 8. Flanders, BE

