



German Economic Team Moldova

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**Potentials and Key Features of Pilot-Cluster
Structures in the Automotive Supply and TAFL
(Textile, Apparel, Footwear and Leather Goods)
Industry in Moldova**

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About the German Economic Team Moldova

The German Economic Team Moldova (GET Moldova) advises the Moldovan government and other Moldovan state authorities such as the National Bank on a wide range of economic policy issues. Our analytical work is presented and discussed during regular meetings with high-level decision makers. GET Moldova is financed by the German Federal Ministry of Economics and Energy. Our publications are publicly available at our website (www.get-moldova.de).

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Executive Summary

In many countries, cluster policies and programmes have been successfully introduced to strengthen competitiveness through active collaboration along strategic value chains. Taking into account international experience, the Government of Moldova plans to introduce a cluster development initiative based on the adopted “Concept for Cluster Development in the Industrial Sector” and aligned with the planned Industrial Policy. In the course of 2016, a roadmap for introducing a cluster-oriented approach in Moldova has been developed. As a key element, the roadmap foresees that the cluster approach is tested in two pilot-clusters before taking a decision on the roll-out of a large-scale initiative.

The stakeholder interviews, statistical analysis and complementary research carried out indicate – despite of challenges that undoubtedly exist – a promising potential for developing pilot-cluster structures in the automotive supply and TAFL industry. A sound basis of ideas for collaborative cluster activities as well as for an organisational model for the pilot-cluster structures could be identified which correspond with international good-practice in cluster development. In both industries, activities in the area of skills development and talent retention have been prioritised. Further cluster activities and measures that have been proposed in the interviews include, amongst others, a pool of specialised mechanics, waste management solutions, certified testing / laboratory services, E-commerce platforms, group sourcing and supplier development programmes.

Taking into account the findings from the stakeholder interviews and international experience, it seems to be realistic to develop a lean, pragmatic organisational model for the pilot-clusters. To utilise synergies and reduce costs, it is suggested that existing organisations take over / host the main functions within the institutional set-up. At the core of the organisation model, the cluster management could be taken over by industry associations. In addition to the management structures at the cluster-level, the proposed organisational model comprises a cross-cluster support unit to ensure a consistent approach and to generate synergies between the clusters. This function could be taken over / hosted by an existing agency, e.g. by ODIMM. Policy alignment and enlisting international assistance is foreseen as a third element of the organisational model. This function could be covered by a ministry, e.g. the Ministry of Economy. Lean structures are considered a main success factor to ensure the feasibility and sustainability of the approach. The proposed model would require not more than one dedicated management position in each organisation at the initial stage.

In order to validate the conclusions and to discuss concrete steps for establishing cluster structures, it is proposed to organise stakeholder consultations in both industries in the fourth quarter of 2017. Building upon the results from the stakeholder consultations, individual meetings should be organised with international partners and donors that have a strong focus on cluster-relevant activities in Moldova. The main purpose of the meetings is to discuss the partners’ interest in getting involved in the introduction of a cluster-oriented approach and their requirements with respect to supporting selected activities. In parallel, the necessary cross-cluster structures should be prepared and set up.

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1 Introduction

In many countries around the globe, cluster-oriented policies and programmes have been successfully introduced to strengthen competitiveness and to address challenges related to structural change. Cluster development is considered as an attractive approach in this regard as it requires rather limited resources from government, yet may generate a significant impact and a high visibility.

Against this background, the Government of Moldova intends to launch a cluster development initiative based on a roadmap developed in 2016. In this context, it is planned to test the cluster approach in two pilot-clusters before a decision is taken on the roll-out of a large-scale initiative.

Taking into account criteria, such as the strategic importance, the growth and innovation potential and the integration into global value chains, the Ministry of Economy has selected the TAFL and automotive supply industry to test the approach. In order to support the necessary planning processes and policy decisions, this policy paper examines the preconditions and potentials for pilot-cluster structures in those two industries.

The paper is structured as follows: As a starting point, chapter 2 summarises Moldova's approach towards cluster development outlining the background and objectives as well as the key principles. Based on stakeholder interviews and complementary statistical analyses and research, chapter 3 takes a closer look at the structural characteristics, development trends as well as at the cooperation climate and interest in cluster activities in both industries. Building upon those findings, conclusions and recommendations on key features of pilot-cluster structures are derived in chapter 4 focusing on the portfolio of cluster activities and potential organisational models. Finally, the document concludes with a proposal on the way forward in chapter 5.

2 Moldova's approach towards cluster development

Taking into account international experience, the Government of Moldova plans to introduce a cluster development initiative. Based on the adopted "Concept for Cluster Development in the Industrial Sector" and aligned with the planned Industrial Policy, the initiative aims at ...

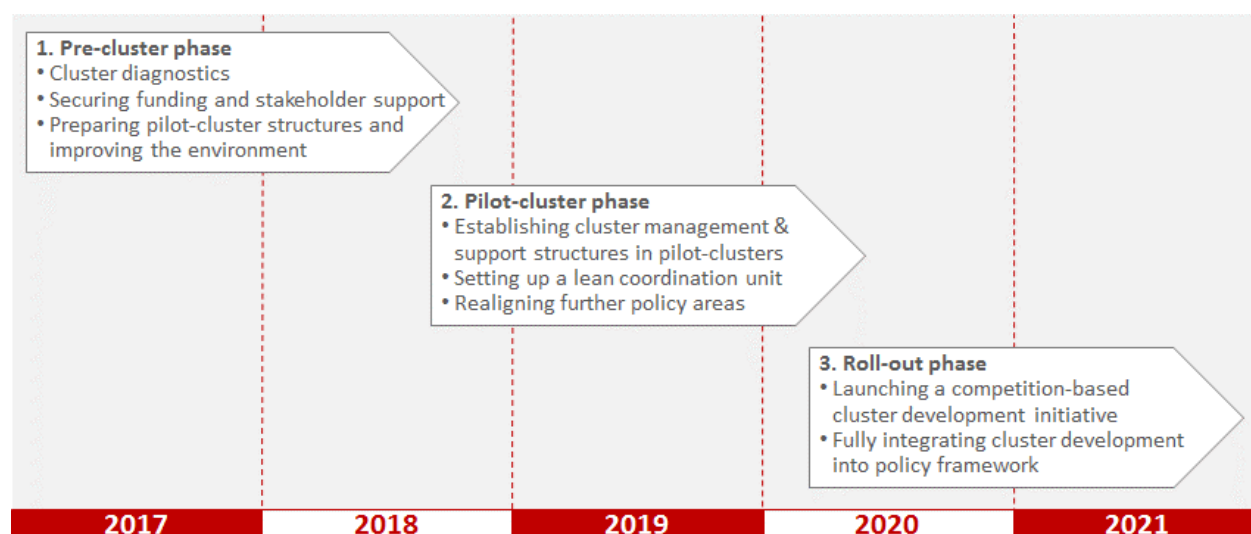
- **Promoting innovation and entrepreneurial development:** Particular emphasis will be placed on upgrading business models and value chains fostering strategic specialisation. In this context, it is considered of strategic importance to strengthen linkages between foreign investors and domestic suppliers.
- **Fostering internationalisation and integration into global value chains:** A main objective is to leverage clusters to raise the profile of Moldova and increase the efficiency of investment and export promotion efforts. The initiative strives to intensify cooperation with other clusters in Europe.
- **Improving collaboration between businesses, academia and government:** Key focus will be on strengthening competitiveness facilitating synergies between the partners and developing a sustainable perspective for relevant projects that have been initiated in close collaboration with international partners.

Based on stakeholder consultations, an assessment of the potentials and preconditions in the country and a review of international experience, a roadmap for introducing a cluster-oriented approach in Moldova has been developed in the course of 2016, comprising three phases: The (1) pre-cluster phase focuses on establishing the analytical base for policy decisions, on securing the necessary funding and stakeholder support and on improving the environment for cluster development. During the (2) pilot-

cluster phase, for the two selected pilot-clusters, management and support structures will be set up to test the approach. Related policy areas and instruments will be realigned. If the approach proves to be successful, a large-scale cluster development initiative will be launched in the (3) roll-out phase. Clusters will be selected for support in a transparent and competitive process keeping the administrative burden to a minimum. A call for proposals will be prepared and announced based on clearly defined eligibility and selection criteria, such as minimum number of participants / members, clear vision and minimum scope of cluster services to be offered and own financial / in-kind contribution of participants.

Figure 1

Phases for introducing a cluster-oriented approach in Moldova



Source: Own illustration

Moldova's approach towards cluster development is based on the following principles:

- **Feasibility:** The approach takes into account the limited resources and aims at triggering a high leverage effect. The cluster development initiative will build upon existing structures to utilise synergies and reduce costs.
- **Integration:** Cluster development will be fully integrated into the policy and strategic framework. Effective intra-governmental coordination is considered a key success factor.
- **Targeting:** Support will be targeted at selected clusters that offer a high development potential and can make a significant contribution towards the initiative's objectives.
- **New model of cooperation:** The approach will be based upon a new model of cooperation between the public and private sector with a strong bottom-up component. Government will focus on the role of a facilitator. Cluster development will be strongly driven by the private sector and further regional actors.
- **Phasing:** Based on the roadmap, the cluster approach will be tested in two pilot-clusters, before a large-scale initiative will be rolled out. Each time, before a phase is entered, interim results will be critically reflected.
- **Regular monitoring:** Support will be subject to regular performance monitoring focusing on indicators, such as the scale of facilitation activities, the number and share of beneficiaries involved in joint activities, the satisfaction and contributions of beneficiaries, net job creation by cluster members and number of cluster-related policy reforms and instruments initiated.

3 Preconditions for developing pilot-cluster structures in the automotive supply and TAFL (textile, apparel, footwear and leather goods) industry

Taking into account criteria, such as the strategic importance, the growth and innovation potential and the integration into global value chains, the Ministry of Economy has selected the TAFL and automotive supply industry to test the cluster-approach. Drawing from stakeholder interviews and complementary statistical analyses and research, this chapter takes a closer look at the structural characteristics and the cooperation climate in both industries. The findings form an important basis to assess the potential for setting up pilot-cluster structures and to derive conclusions with respect to a needs-oriented portfolio of activities and an efficient and sustainable organisational model.

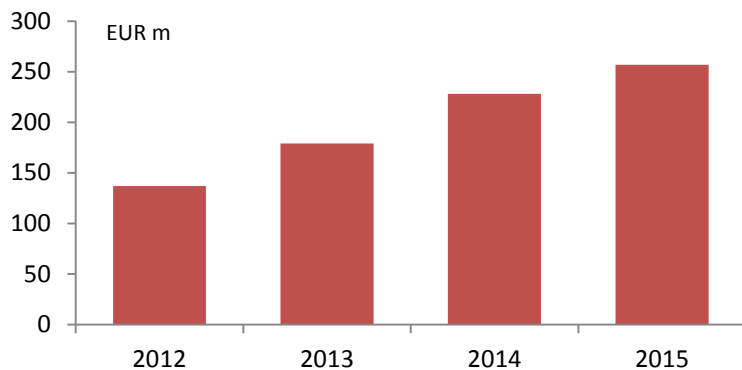
3.1 Structural characteristics and key development trends

Automotive supply industry:

The Moldovan automotive supply industry has been born out of Moldova's strong industrial past and has become one of the most dynamic industries in Moldova in a matter of years. The estimated total export value from the automotive supply industry increased from EUR 137 million in 2012 to EUR 257 million in 2015¹. The most significant production volumes are concentrated in parts such as seat covers, wires and cable harnesses as well as injection moulding of plastic parts and metal processing.

Figure 2

Moldovan automotive component exports



Source: MIEPO

The rapid growth of the newly developing automotive supply industry has affected the country's export structure fostering export growth and diversification. While Moldova's exports mainly consisted of primary and resource-based products in 2003, co-axial cables became the top export by 2013 more than doubling in total export value within 3 years². Seat parts made the list of the top ten exports that year as well. Co-axial cables and other car parts account for approximately 20 percent of Moldova's total exports.

¹ *Automotive Components and Industry Overview*, MIEPO, 2016

² *Moldova Trade Study – Analysis of Trade Competitiveness*, The World Bank, 2016

Table 1

Top 5 export commodities 2016

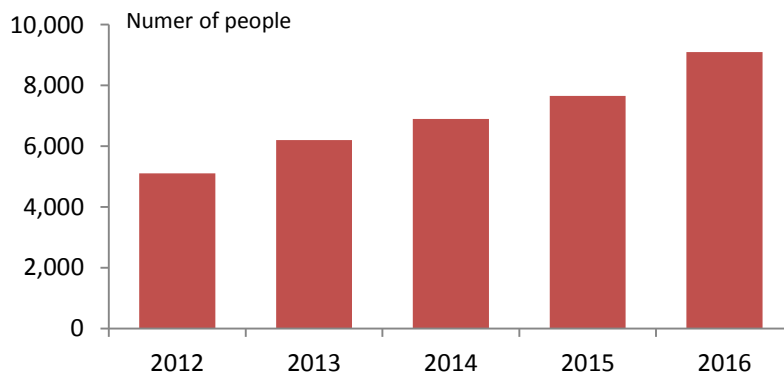
HS Code	Commodity	Value in million USD	
		2016	(2010)
8544	Insulated (including enamelled or anodised) wire, cable	224.8	(91.1)
1206	Sunflower seeds, whether or not broken	178.7	(57.3)
2204	Wine of fresh grapes, including fortified wines	107.9	(137.9)
0802	Other nuts, fresh or dried, whether or not shelled or peeled	85.5	(59.8)
9401	Seats (other than those of heading 94.02)	100.9	(20.0)

Source: UN Comtrade

The number of employees in the industry has grown significantly and has doubled since the year 2012 according to estimates by MIEPO². The dynamic growth in employment in the automotive supply industry is expected to continue.

Figure 3

Number of employees in the automotive supply industry in Moldova



Source: MIEPO

Moldova was able to integrate into global automotive value chains over a relatively short period of time. The rapid growth of the automotive supply industry has mainly been fuelled by large foreign investments in the country. In particular in the fields of wires and wiring harnesses (e.g. Dräxlmaier, Gebauer&Griller, Sumitomo, Fujikura), seat covers (e.g. Lear) as well as further textile-related products (e.g. Confezione Andrea), major projects were realised by foreign investors with considerable effects on employment and exports.

The most recent investments confirm a continued interest of international investors from the automotive industry in Moldova. Furthermore, multiple companies have expanded their production

capacities after their initial investments. For example, the German producer of automotive wiring harnesses, Dräxlmaier, made its initial investment in Balti in 2009 and added a second plant in 2011 employing approximately 3,000 workers in total. Dräxlmaier is now set to open a third plant in Balti. According to a press release by the FEZ Balti, the company will employ an additional 2,500 workers at the new plant.

Moldova's FEZs have played a key role in attracting foreign investors from the automotive supply industry to the country. Especially the FEZs in Balti and Ungheni have become major hubs in recent years. In total, approximately ten first and second tier international automotive suppliers have set up production plants in Moldova. However, the integration of potential local suppliers into the value chains is still at an early stage. The cluster approach could support the process of supplier development among local SMEs. Another focus should be on extending and upgrading value chains. Currently, the automotive supply industry in Moldova is characterised by a rather narrow profile with respect to value chains covered – with high concentrations at the same stage of those value chains.

TAFL (textile, apparel, footwear and leather goods) industry:

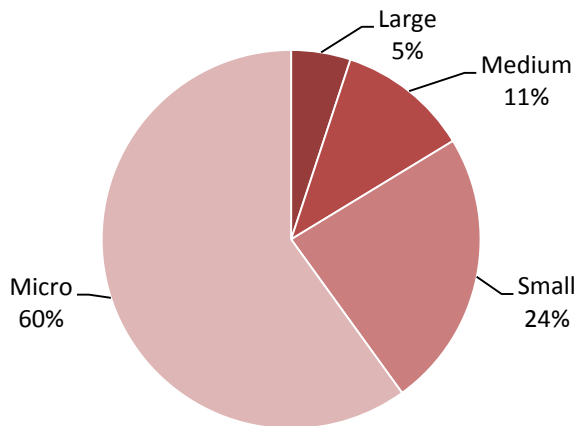
The TAFL industry builds upon a longstanding tradition and remains a key industry in Moldova. After a process of restructuring and upgrading in light of the liberalisation and privatisation of the Moldovan economy, it has exhibited continuous growth since 2000. According to USAID³, the TAFL industries represented 10.3% of Moldova's industrial production and made up a share of 16.4% of the country's total export volume in 2015. Main products include textiles such as knitted garments, carpets and fabrics, wearable apparel, leather and leather accessories as well as travel accessories and footwear.

Approximately 550 companies operate in the industry. Of those companies, 28 are classified as large companies (e.g. IONEL), while the majority is made up by small companies with no more than 50 employees (e.g. Crème Brûlée) and medium-sized companies (e.g. Oldcom, Ponti, Georgette, Steaua-Reds). Within the country, 60% percent of companies are located in the central region, 21% in the north and 18% in the south. Nearly 23,000 people are employed in the TAFL industry, representing 4.4% of the total workforce in the economy. Large companies make up the biggest share of the total annual turnover and employ over 50% of the total workforce in the industry.

³ *Recommendations for creating a roadmap for competitive development of Moldovan Fashion Manufacturing industry*, USAID, 2016

Figure 4

Number of companies by size in the Moldovan TAFL industry

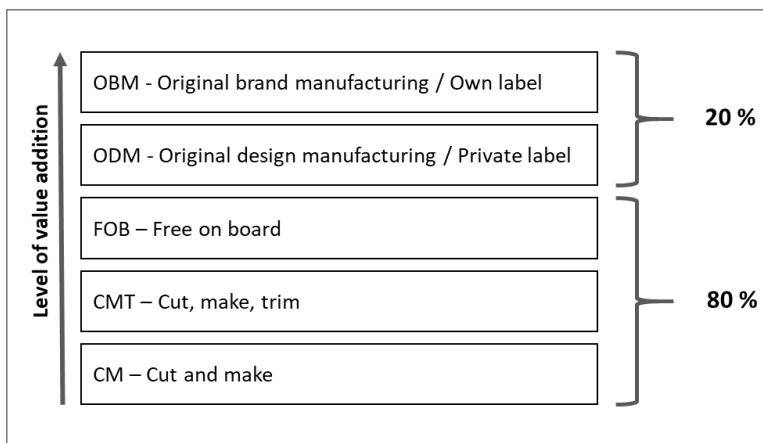


Source: USAID

The industry is traditionally export-oriented, with an export share of 82% of total production value in 2015. The main export markets include Italy, Germany, Romania, Austria and France. Moldovan textile and apparel producers supply internationally renowned brands such as Versace, Armani, Primark, Nike and Dolce & Gabbana. However, low valued-added CM (cut and make) as well as CMT (cut, make, trim) services make up a significant share of apparel and leather goods exports with 92% and 99% respectively.

Figure 5

Share of different business concepts in the Moldovan TAFL industry



Source: MIEPO

Estimates on the total share of CM and CMT in exports from the industry vary. According to MIEPO⁴ 80% of total production value is CM, CMT and – to a smaller extent – FOB, with the remaining 20% made up

⁴ *Textile, Apparel, Footwear and Leather Goods*, MIEPO, 2016

by private label and own label production (see figure 5). CM and CMT refer to business models in which the customer supplies all designs and materials and the manufacturer only provides production services in terms of cutting, sewing (and trimming). In the FOB model, the manufacturer works according to the customers design and material specifications, but is in charge of the entire process from sourcing to delivery of the finished product for retail. ODM and OBM refer to producers that design and produce their own goods. OBM or own label manufacturers market their products under their own brand, while ODM or private label producers provide their products to be marketed under the buyer's brand.

A key objective for the Moldovan TAFL industry has been to upgrade production to higher levels of value addition by means of increasing the market share of own brands in the domestic and regional market and upgrading to higher value-added concepts in export, such as FOB and ODM.

In recent years, various programmes have been initiated with assistance by international partners aiming at upgrading domestic companies, such as the joint promotional campaign *Din inima branduri de Moldova* ("From the Heart – Brands of Moldova") or the "ZIPHouse" Center of Excellence and Acceleration in Design Technologies which is providing advanced training and technical resources for local designers and manufacturers. Those initiatives which will be described in closer detail in chapter 3.2 form a sound basis for cluster development efforts.

3.2 Cooperation climate and interest in collaborative cluster development efforts

Besides certain structural characteristics, the cooperation climate and interest in collaborative efforts to strengthen competitiveness represent key prerequisites for cluster development efforts in order to generate synergies and spill-over effects. Against this background, key emphasis was placed in the interviews and complementary research on assessing, if the stakeholders see a benefit and added value in collaborative cluster development efforts, if there are common interests with respect to cluster activities and if the stakeholders are willing to make an active contribution.

The interviews carried out confirm a high level of interest in establishing pilot-cluster structures in the automotive and TAFL industry, while acknowledging challenges related to the structural conditions and the cooperation climate. It has been pointed out, that the experience with cooperation-based approaches is rather limited so far and trust still needs to be build up amongst companies as well as between the private sector, academia and government.

Overall, the stakeholders perceive the cluster approach as a chance to ...

- Develop a sustainable perspective for competitiveness enhancement activities and projects that have been initiated with the assistance of international partners
- Improve coordination between the triple helix players (business, academia, government) in particular at the strategic level
- Extend the range of services and projects fostering cooperation and innovation in the automotive supply and TAFL industry with a particular focus on developing and upgrading value chains
- Raise awareness of relevant services and projects within the country
- Enhance integration of SMEs into relevant initiatives and strengthen linkages between foreign investors and domestic suppliers
- Exploit innovation and investment potentials at the interface between different fields of technology and application.

Another chance highlighted in the interviews relates to the access to various international cooperation and funding opportunities for cluster organisations and their projects. Measures proposed range from bilateral activities such as cluster twinning to multilateral cooperation projects and programmes. It has been mentioned as an example in this context that apparel clusters in Southwestern Europe are currently collaborating on a joint strategy for the internationalisation of SMEs in the textile industry in the form of an Interreg project co-funded through the European Regional Development Fund (ERDF). In addition to the direct benefits of cooperation, participating in transnational initiatives helps raise the profile of a cluster and region.

The interviews and complementary research also revealed a range of already existing cluster-related activities and projects. In this context, for instance, the “ZIPHouse” Center of Excellence and Acceleration in Design Technologies represents a typical triple helix project. It has been established in 2015 through a public-private partnership between the Ministry of Education, the Technical University of Moldova and the Light Industry Employers’ Association of Moldova (APIUS) with assistance by USAID. ZIPhouse offers several training programmes, production and CAD-facilities as well as an accelerator fostering innovation and entrepreneurial development in the industry.

Another relevant initiative is the joint promotional campaign Din inima branduri de Moldova (“From the Heart – Brands of Moldova”) supported by USAID and geared towards creating awareness and appreciation for apparel by local brands. The initiative started with twelve local companies in 2012. By 2015, 60 local brands joined the campaign and presented their collections in bi-annual fashion shows in spring and fall. In addition, the initiative sparked the idea for multi-brand stores that carry only Moldovan brands.

Further cluster-related activities can be found, amongst others, in the following areas:

- Promotion and networking (e.g. Automotive Days)
- Internationalisation and supplier development (e.g. trade fair stands / visits, supplier days)
- Skills development (e.g. facilitating internships, realigning vocational training, design and productivity enhancement trainings).

Several stakeholders have offered in the interviews to take over an active role in the cluster development process. International organisations also showed an openness for the cluster approach and indicated their interest in contributing towards developing a sustainable perspective for existing projects and activities.

The spectrum of existing cooperation-based initiatives as well as the feedback from the stakeholders in the interviews indicate – despite of challenges that undoubtedly exist – a promising potential for developing pilot-cluster structures in the automotive supply and TAFL industry. At the same time, it needs to be borne in mind that a cluster development initiative should build upon the existing structures and projects to avoid duplication and inefficiencies.

4 Key features of the planned cluster development initiative / Key features of the pilot-cluster structures

The stakeholder interviews also indicate a promising basis of ideas for collaborative cluster activities as well as for an organisational model for the pilot-cluster structures which correspond with international experience and good-practice in cluster development.

4.1 Portfolio of cluster activities and services

As a starting point, the range of innovation-oriented services already offered by organisations, such as APIUS, ZIPhouse or MIEPO, often with assistance by international partners, received positive feedback in the interviews. In the medium term, those activities could form a core part of the service portfolio of the pilot-cluster structures and the relevant expertise should be transferred. In this context, it has been also proposed that related activities aiming at the interface between the TAFL and automotive industry (e.g. seat and car covers) and further industries (e.g. applied engineering at the interface of the automotive and IT industry) should be integrated into cluster development efforts.

A number of complementary activities to be offered by pilot-cluster structures have been brought forward – with a strong focus on services providing tangible benefits to stakeholders which could motivate them to become a (paying) member of the cluster and on opportunities to generate income (paid services). In both industries, activities in the area of skills development and talent retention would be prioritised. From the stakeholders' point of view, measures aiming at increasing the number of students and extending the spectrum of courses (e.g. technical courses) in line with the industries' needs could make an important contribution towards strengthening competitiveness.

In addition, a number of activities have been proposed aiming at talent retention and raising students' awareness of employment and career prospects in local companies (incl. SMEs). Amongst others, those include lectures by company managers in relevant courses, intensifying company visits and cooperation projects (e.g. „Students on Tour“) and jointly developing dual degree programmes combining academic education and vocational training. In addition, it has been suggested that training facilities (e.g. for sewers/ operators in the light industry) could be run by the cluster organisations.

Further cluster services that have been proposed in the interviews include:

- Setting up and managing a pool of specialised mechanics for SMEs in the TAFL industry
- Developing waste management processes and solutions for the automotive supply industry
- Introducing a model of temporary work
- Offering certified testing / laboratory services (e.g. for children's clothes)
- Developing E-commerce platforms for the TAFL industry
- Writing proposals and applications for funding
- Developing international contact networks with other clusters
- Group sourcing and training of existing distributors
- Assisting domestic SMEs in their business development efforts and in meeting the requirements of their customers.

Beyond activities to be taken up by individual clusters, in particular financing has been highlighted as a major bottleneck for upgrading value chains and business models which would need to be addressed at the cross-cluster or policy level. Soft loans have been pointed out as an option to assist companies to finance e.g. investments in raw materials or equipment to meet the needs of their customers.

The suggested activities are in line with international good-practice. Clusters across Europe are active in areas similar to those that have been brought forward by the interview partners in Moldova. For instance, the portfolio of the OTIR2020 - NEXT Technology Tecnotessile textile cluster and research & training centre in Tuscany, Italy, includes workshops on current themes such as the benefits of e-business for SMEs, laboratories to develop and test new materials and products, joint research and technology transfer projects and participation in transnational events and programmes such as the RESET Interreg project on improving competitiveness by developing sustainable textile and clothing products and processes.

Also with respect to the issues and ideas for joint activities brought forward in the automotive supply industry, there is already a wide spectrum of clusters with relevant experience all over Europe that can serve as potential cooperation partners. Approximately 70 automotive clusters are registered with the European Cluster Collaboration Platform (ECCP) and are actively seeking to connect. For instance, industry-specific waste management solutions which have been highlighted as a priority in the stakeholder interviews in Moldova are offered by clusters in central Germany focusing on metal processing and packaging. The clusters have developed joint waste management programmes that help members reduce costs and improve coordination along the value chain. The activities are driven by members' needs and generate tangible benefits for the participating companies. The key elements of the programme include standardised analyses of current waste management processes and needs, a joint agreement with an external service provider offering a discounted rate to all cluster members and pooling mechanisms for companies facing similar challenges.

4.2 Organisational model

Taking into account the findings from the stakeholder interviews and international experience, it seems to be realistic to develop a lean, pragmatic organisational model for the next phase integrating the key stakeholders and their competencies in the cluster development process. To utilise synergies and reduce costs, it is suggested that existing organisations take over / host the main functions within the institutional set-up – at least in the beginning. Later on, a spin-off process could be considered.

At the core of the organisational model, the cluster management could be taken over by industry associations. The cluster management is responsible for the coordination and implementation of the collaborative innovation-oriented activities at the cluster level that have been jointly defined by the members. As mentioned above, the activities could include, amongst others, skills development and internationalisation measures or offering waste management solutions. Furthermore, the cluster management is responsible for planning and initiating new needs-oriented cluster activities and projects (e.g. lab services) in close cooperation with strategic partners.

Cluster organisations and associations, by nature, have a significant overlap in the (private sector) members they target and activities they carry out. To avoid competition, some level of institutional integration is quite common.

A key difference between an industry association and a cluster organisation is the representation or involvement of the public sector and academia or training institutions (triple helix). While industry associations often engage with government in the form of lobbying, cluster organisations rather provide the platform for cooperation and joint initiatives. Furthermore, cluster organisations focus more strongly on value chains while industry associations follow a more sectoral approach.

Industry associations can take on a number of roles in the institutional set-up of clusters. Two typical models that are of relevance in the Moldovan context include:

1. The association takes on the role of the cluster management and ensures the representation of the public sector and academia by establishing a cluster or advisory board. All members of the industry association are members of the cluster by default.
2. The association hosts or sponsors the cluster management by providing capacities and infrastructure as well as establishing a cluster or advisory board. The cluster management acts as a separate entity and may need to raise additional funding, e.g. in the form of membership fees or paid services. Members of the association either become cluster members by default or by applying for membership in case an additional fee is required.

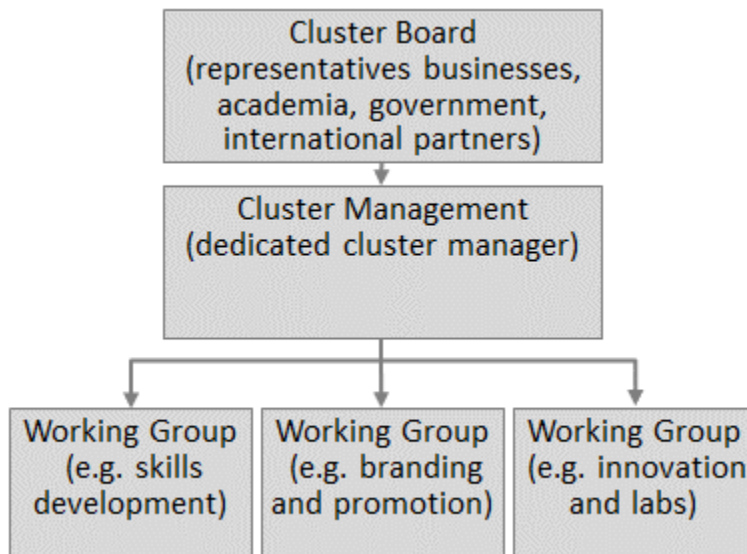
The appropriate organisational model needs to be discussed and developed in close collaboration with the relevant stakeholders. Amongst others, the following aspects should be taken into account:

- Existing positioning and capacities of the association (What role does advocacy play? What cluster-related services are already offered? What are the administrative capacities?)
- Profile of other industry organisations (What areas do / can they cover – e.g. advocacy?)
- Planned business model (Is it geared more towards membership fees or paid services?)
- Interests of existing members (What share is interested in cluster activities?)

To strengthen triple helix coordination, a cluster board should form a core part of the organisational model. Furthermore, it should be considered to open up membership, to integrate academic and government institutions as well as further service providers (e.g. banks) into working groups etc.

Figure 6

Typical structure of a cluster management organisation



Source: Own illustration

In addition to the management structures at the cluster-level, the proposed organisational model comprises a cross-cluster support unit to ensure a consistent approach and to generate synergies between the clusters. This function could be taken over / hosted by an existing agency, e.g. by ODIMM, building upon experience gained in supporting incubators. The support unit is responsible for the training of cluster managers as well as members of cluster boards (e.g. seminars, mentoring

programmes, study tours, work shadowing) and for the common branding and promotion of the clusters (e.g. website / micro-sites, periodic newsletters, cluster directories etc.). Furthermore, its main tasks comprise facilitating knowledge transfer between the clusters and initiating and coordinating cross-cluster projects.

Policy alignment and enlisting international assistance is foreseen as a third element of the organisational model. This function could be covered by a ministry, e.g. the Ministry of Economy. Cluster development requires an integrated approach. In order to improve the framework conditions for cluster development, related policy areas and instruments need to be aligned towards the selected strategic clusters. Against this background, key focus of this function is taking up ideas for business environment reforms identified in the process and initiating new policy instruments (e.g. soft loans) or aligning the relevant policy and planning framework, e.g. the capacities at universities. Furthermore, enlisting international partners' support as well as the extension and refinement of Moldova's cluster development efforts (e.g. the roll-out of a large-scale cluster development initiative) belong to the key tasks of this function.

Lean structures are considered a main success factor to ensure the feasibility and sustainability of the approach. The proposed model which is summarised in the figure below would require not more than one dedicated management position in each organisation at the initial stage.

Table 2

Key functions, tasks and division of responsibilities within the organisational model

Functions	Key tasks	Responsible organisation
Cluster management	<ul style="list-style-type: none"> • Implementing activities / delivering services at cluster level in close cooperation with strategic partners <ul style="list-style-type: none"> • Planning / initiating new cluster projects 	Industry associations (e.g. APIUS, APIP)
Cross-cluster support	<ul style="list-style-type: none"> • Training cluster managers and members of cluster boards <ul style="list-style-type: none"> • Applying for international funding • Common branding and promotion of clusters • Facilitating knowledge transfer and cross-cluster projects 	Agencies (e.g. ODIMM)
Policy alignment and enlisting international assistance	<ul style="list-style-type: none"> • Taking up ideas for business environment reforms and initiating new policy instruments <ul style="list-style-type: none"> • Aligning relevant policy and planning framework <ul style="list-style-type: none"> • Enlisting international partners' support • Roll-out of a large-scale cluster development initiative 	Ministries (e.g. MEc, MEd)

Source: Own illustration

5 Way Forward

The findings from the interviews, the statistical analysis and complementary research carried out indicate a promising potential for developing pilot-cluster structures in the automotive supply and TAFL industry in Moldova. In order to validate the conclusions and to discuss concrete steps as well as the division of tasks for establishing cluster structures, it is proposed to organise stakeholder consultations in both industries in the fourth quarter of 2017.

In the case of the automotive supply industry, a round table event seems advisable addressing a larger audience comprising relevant foreign investors and domestic SMEs, ministries and agencies, such as Ministry of Economy, Ministry of Education, ODIMM and MIEPO, universities, colleges, vocational training centres, chambers and associations, international partners and further service providers. As the automotive industry and the corresponding institutional set-up still are at a rather early stage of development, the main objective of the event is to validate if the stakeholders – in particular the companies – share enough common interests as a basis for sustainable cluster structures.

For the TAFL industry – with its already more developed institutional set-up, an exploratory meeting is proposed focusing on the key stakeholders as a first step – in particular the relevant ministries and agencies, ZIPhouse, associations and international partners. The exploratory meeting serves to develop a common vision and understanding of the way forward before more widespread consultations are organised. This approach is supposed to ensure a coordinated communication clearly pointing out to the companies and further cluster actors how the cluster structures complement the existing initiatives.

For the round table as well as the exploratory meeting, the following main agenda points are suggested:

- Welcome and setting the scene – introduction on the background of the consultations and Moldova's approach towards cluster development
- The suitability of clusters to strengthen the competitiveness of the automotive supply / TAFL industry – results from stakeholder interviews and lessons learnt from international experience
- The way forward – discussion of conclusions, common interests and concrete next steps
- Wrap up and closing remarks

Building upon the results from the stakeholder consultations, individual meetings should be organised with international partners and donors that have a strong focus on cluster-relevant activities in Moldova, such as GIZ and USAID. The main purpose of the meetings is to discuss the partners' interest in getting involved in the introduction of a cluster-oriented approach and their requirements with respect to supporting selected activities. From today's perspective, this relates – amongst others – to a collaboration and support in the following areas:

- Implementation concepts for the two clusters (e.g. participative vision building and action planning, organisational model and business planning, monitoring and evaluation concept) and pilot-activities
- Capacity building for cluster managers, members of cluster boards and the cross-cluster support unit (e.g. study tours, work shadowing, seminars, training and mentoring programmes, participation in international cluster venues and conferences)
- Funding of salaries of cluster management, infrastructure and pilot-activities
- Cluster marketing (e.g. branding for cluster programme / pilot-clusters, website / micro-sites for the pilot-clusters, periodic newsletter, cluster directories).

In parallel, the Ministry of Economy in collaboration with other ministries and agencies, such as ODIMM, should prepare and set up the necessary cross-cluster structures. This requires that responsibilities are assigned as well as that resources and capacities are secured for the cross-cluster support unit and for the function of aligning policies and enlisting international assistance.

On this basis, the second phase of the roadmap (pilot-cluster phase) can be entered focusing on testing the approach before taking a decision on the roll-out of a large-scale cluster development initiative.

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