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Government Advice to Economic Development (Lot 2)

Feasibility Study for the Planned Investment Site in Calarasi

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ABBREVIATIONS

CAPEX	Capital Expenditure
CEE	Central and Eastern Europe
EIB	European Investment Bank
EU	European Union
EY	Ernst & Young
FDI	Foreign Direct Investment
FEZ	Free Economic Zone
FNPV	Financial Net Present Value
FRR	Financial Rate of Return
ICT	Information and Communications Technology
MDL	Moldovan Leu
MIEPO	Moldovan Investment and Export Promotion Organization
ODIMM	Organization for Small and Medium Enterprises Sector Development
OEM	Original Equipment Manufacturer
OPEX	Operational Expenditure
SEE	Southeastern Europe

EXECUTIVE SUMMARY

Based on a transparent and competitive selection process, the site in Calarasi has been awarded technical assistance in form of a thorough feasibility study as a starting point. The pilot-initiative forms part of the technical cooperation project “Economic policy advice to the Moldovan Government” which is implemented by GIZ in close collaboration with the Ministry of Economy and Infrastructure of the Republic of Moldova and the Moldovan Investment and Export Promotion Organization (MIEPO).

Comparing strengths and weaknesses, the site in Calarasi can differentiate itself through its strategic geographic location, favourable transport links and comparatively large labour force potential which has not yet been tapped by a large greenfield project. However, the necessary capital expenditure for the levelling of the site constitutes a major obstacle for the development process.

With respect to external factors, an FEZ status could have a strong impact on the development prospects of the site. In case of obtaining the FEZ status, the project could benefit from the corresponding incentive framework and the experience of the FEZ Ungheni. Furthermore, the competitiveness at the macro-level will play a decisive role for the success of the project.

The development of investment dynamics, Moldova’s track record as well as recent company enquiries in the region indicate that there are relevant investment potentials which the planned site can tap. International investment potentials will play an important role for the planned site. However, it should be noted that in comparison to many other locations in Moldova, the site can tap a wider scope of investment potentials which also includes promising local relocation and expansion potentials.

At the international level, which is characterised by an increasingly intense competition, Moldova is well-positioned regarding the most important location criteria, in particular the operating costs. At the regional and local level, where competition is less intense, the proposed site can differentiate itself through a flexible offer of plots – in particular for greenfield projects.

The financial feasibility of the project will be strongly affected by the amount of soil works necessary for the levelling which can be estimated more accurately only once a soil expertise has been carried out. Against this background, the analysis of the financial feasibility is based on two scenarios (high vs. low volume of expenditure for soil works). According to the forecasts, the planned project would only be financially viable if the soil works and corresponding expenditure can be kept to the minimum possible (scenario 2). Under this assumption, for a 20 year time horizon, a net present value of approximately 6.1 million MDL and an internal rate of return of 6.4% are forecasted.

According to the estimates, a positive cash flow can be generated from the fourth year onwards. On this basis, future investments to extend or upgrade the site could be financed from own resources.

Furthermore, the project can make an important contribution towards the socio-economic development of the region. The creation of additional direct and indirect employment – in the range of 3,200 new jobs – and the additional income generated this way constitute the principal benefit at the regional level. At the same time, revenues for public budgets can be increased significantly. This relates in particular to labour-related taxes and social security contributions as well as – to a lesser extent – to corporate income taxes and VAT.

Taking into account the results of the different stages of analysis, a phased development approach seems advisable to reduce the risks and burden for the public budgets. Based on the results of the analyses, it seems realistic to attract a sufficient volume of investment projects and financially viable to develop the infrastructure and organisational set-up for a first phase comprising approximately 18 ha – provided that the expenditure for soil works can be kept within feasible limits. Depending upon the performance and the development of external factors a next phase could be initiated which could also take into account the lessons learnt during the first stage. A key prerequisite for the proposed phased approach is that the land for the proposed project as well as for future expansions remains in public ownership.

In order to use resources efficiently, it is recommended, to set up the off-site infrastructure (incl. soil works) and the fence as a first step to support the promotion of the site and to prove commitment in the eyes of investors. The subsequent investments (on-site infrastructure, buildings for customs and administration) should only be initiated once the first residents have been attracted.

Systematic investment promotion efforts are of critical importance to tap the identified potentials. The initial focus of investment promotion efforts should be on the following product groups and activities:

- Agro-processing and food production
- Plastic parts and components for the automotive industry as well as for further industrial applications
- Apparel and footwear
- Composite and industrial textiles
- Wire harnesses
- Assembly of electrical / electronic components.

To prepare the implementation of marketing activities which should be carried out in close collaboration with strategic partners and intermediaries, a basic set of target-group-specific marketing materials should be developed. A brochure / exposé should highlight the key messages and location-specific benefits. A fact sheet should summarise the key messages and information from the brochure. The design should be aligned to the guidelines of the planned brand book for FEZ.

In order to raise awareness for the new investment site, a number of image building measures can be carried out. This includes the development of an online presence as well as regional PR activities and events. Furthermore, a key focus of marketing activities should be on pro-active lead generation campaigns in close collaboration with partners – such as MIEPO. Lead generation campaigns should be carried out in the context of relevant trade fairs and events and should be aligned to the defined target groups.

In order to reduce the burden on public budgets, a lean organisational model is recommended. It should be considered to develop the site as a subzone of the FEZ Ungheni, which offers promising synergy potentials and allows to benefit from the wide spectrum of relevant experience of the FEZ administration and thus to avoid redundancies.

At the same time, it is of crucial importance that key partners – such as local and regional authorities – and their expertise are integrated to fully unlock the potential of the site for regional development. In order to ensure a high level of cooperation and coordination, it is advisable to establish a task force or steering committee in which all relevant stakeholders are represented. Based on a joint initiative approach, this body could define strategic objectives as well as operative measures and coordinate the delivery of complementary services.

The financing model should also reflect the joint initiative approach mentioned above. Initial funding – in particular of the soil works and off-site infrastructure – will largely have to be sourced from the budgets of the municipality and the raion. In addition, it is recommendable to submit an application for funding to the Central Regional Development Agency. Provided the site can be developed as a subzone of the Free Economic Zone Ungheni, it seems realistic that in the medium term the FEZ administration can finance the necessary capital expenditure for extending and upgrading the site from revenues generated – in particular from administrative fees. In the medium and long term, it should also be considered to involve private sector expertise and resources in the expansion or upgrading of the site to meet the increasingly sophisticated service and infrastructure needs from investors.

From an investment promotion perspective, it is vital not only to analyse the feasibility of a site for industrial development but also to ensure planning security for potential investors. Against this background, as a next step, the development of a zoning plan (PUZ) is foreseen building upon the results from the feasibility study. The property formation and a soil expertise to validate the findings from the assessment of the technical and financial feasibility constitute important preparatory steps.

Based upon the results and the experience gained as part of this pilot-initiative, GIZ will decide – in close collaboration with the Ministry of Economy and Infrastructure of the Republic of Moldova – upon further tailored support for the selected investment sites as well as upon a roll-out of a larger-scale programme.

1 INTRODUCTION

In close collaboration with the Ministry of Economy and Infrastructure of the Republic of Moldova and the Moldova Investment and Export Promotion Organization (MIEPO), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, acting on behalf of the German Government, is implementing a technical cooperation project named "Economic policy advice to the Moldovan Government" for three years from 2016-2018. The project aims at improving the investment conditions of Moldova in order to attract national and foreign investments, which should create employment opportunities for the local population.

As part of this cooperation project, three strategic investment sites in Moldova have been awarded technical assistance based on a transparent two-stage competitive application process. In addition to the site in Calarasi, proposals from Ceadir-Lunga and Cahul have been selected taking into account in particular the suitability of the locations, the relevant investment potential and competitive position as well as the added value and risks of the development projects.

The sites receive technical assistance in form of a thorough feasibility study – including a development concept – as well as a zoning plan (PUZ) to ensure planning security for local and foreign investors. The transfer of international experience in planning investment sites – integrating good practice examples amongst others from Germany, Hungary and Poland – forms an important element of the technical assistance. The measure is designed as a pilot-initiative. Depending upon the experience gained, it is planned to roll-out a larger-scale programme supporting the development of additional investment sites.

Against this background, the report at hand documents the findings from the assessment of the market, technical and financial feasibility of the proposed site in Calarasi as well as the conclusions and recommendations regarding the way forward.

The development of the feasibility study has been based on the following guiding principles:

- **Market oriented approach:** Particular emphasis has been placed on the assessment of the investment potentials and competitive position in order to come up with a realistic development model.
- **Needs oriented approach:** The needs of the investors have formed an important point of reference for the analyses carried out as well as for the recommendations, e.g. regarding the development of the infrastructure and service portfolio or the promotion of the site.
- **Unprejudiced approach:** The development model has been shaped and refined based on the assessment of the technical, market and financial feasibility – without a predetermined profile or size of the project.
- **Implementation oriented approach:** The typical practical challenges have been kept in mind throughout the process and have been addressed as part of the recommendations. Good practice examples have been used to illustrate recommendations.

- **Phased approach:** The development process has been divided up into different stages to reduce the risks and allow for refinements in the course of the implementation.
- **Participatory approach:** Stakeholder engagement has formed a key element of the work programme to align the development model to the regional context and to ensure acceptance and ownership. As part of the site visits, interviews and round table formats have been carried out involving amongst others representatives of the raion and municipality, the village Tuzara and utility providers. Further interviews were conducted with industry and investment promotion experts (e.g. from MIEPO, chambers and industry association) as well as with international investors.

The report is structured as follows: An assessment of the site characteristics and a SWOT-analysis form the starting point. Chapter 3 and 4 focus on the market feasibility analysing the investment potentials and competitive environment at the international as well as regional and local level. Building upon the findings from the previous stages, chapter 5 contains an assessment of the economic and financial feasibility which also takes into account the potential contribution of the proposed project towards the socio-economic development of the region. Considering interdependencies between the dimensions technical, market and financial feasibility, chapter 6 outlines a stage-based development concept covering the areas infrastructure and configuration, promotion, organisation and financing. The report concludes with an outlook on the next steps foreseen as part of the technical assistance.

2 SITE CHARACTERISTICS AND SWOT-ANALYSIS

2.1 Location, utilities and connections to the transport network

The land foreseen for the project is located in the village Tuzara – next to the southern boundary of Calarasi. According to the land registry, the total size of the land foreseen for the development project amounts to 42 ha. Part of the surrounding area is used for agricultural purposes, the other part is unused. On the land adjacent towards the east, a number of companies are located. There are residential areas In the north and south of the site. The surface of the plot is even and located in a valley. The bordering city of Calarasi on the north side and the Tuzara village in the south have a higher levelled location.

Figure 1: Location of the planned site in Calarasi

All necessary utilities are in close proximity of the site, while the current connection to the road network is in bad condition. The access to the site is currently provided from a local road. The municipality is planning to asphalt the road next year. As part of the development process, it is foreseen to connect the site directly to the regional road.

The visually estimated distances to handover points are as follows:

- Gas: middle pressure ~350m from the west boundary of the site
- Power supply: 10kV substation ~2.300m from the east boundary
- Water: ~1.000m from the north-east boundary
- Sewage: ~150m from the east boundary.

Figure 2: Utility connections for the planned site

Calarasi is located in the northwestern part of Moldavia close to the Romanian border. Calarasi is connected to the national road network via four roads:

- R1 in south-east direction to Chisinau
- R1 in north-west direction to Ungheni
- R20 in north-east direction to Orhei
- R44 in south-west direction to Lozova.

The distance to the nearest check point to Romania in Sculeni is 65 km.

Calarasi is connected to the railway network. The railway station serves the city and is operated by Moldovan and Russian Railways. It provides direct rail connections to Chisinau and Ungheni. Furthermore, the international train Chisinau – Moscow is stopping in Calarasi.

The main part of external as well as urban transport is realised by car and buses. Most popular are minibuses on five city lines which are working between the centre of the city and the residential areas. The surrounding area is connected by 2 bus lines (No. 4, No. 6) to the public transport. The main traffic of Calarasi is concentrated on the streets in the inner city. For the future, it is planned to relieve the city centre of traffic by a ring road and construction of new short-connecting roads between different sectors of the city.

At present time there is an existing regional road R44 to the planned site. The national road R1 Chisinau-Sculeni is 400m from the plot via R44. The external passenger as well as the truck traffic would go by the regional road via the most used central roads. Experience from industrial zones in other countries shows that a predominant quantity of workers is arriving to the industrial zone from outside by busses organised by the employer. Buses with

employees from western and southern directions reach the plot without city transit and buses with employees from northern and eastern directions have to drive through the city.

Figure 3: Connections to the transport network

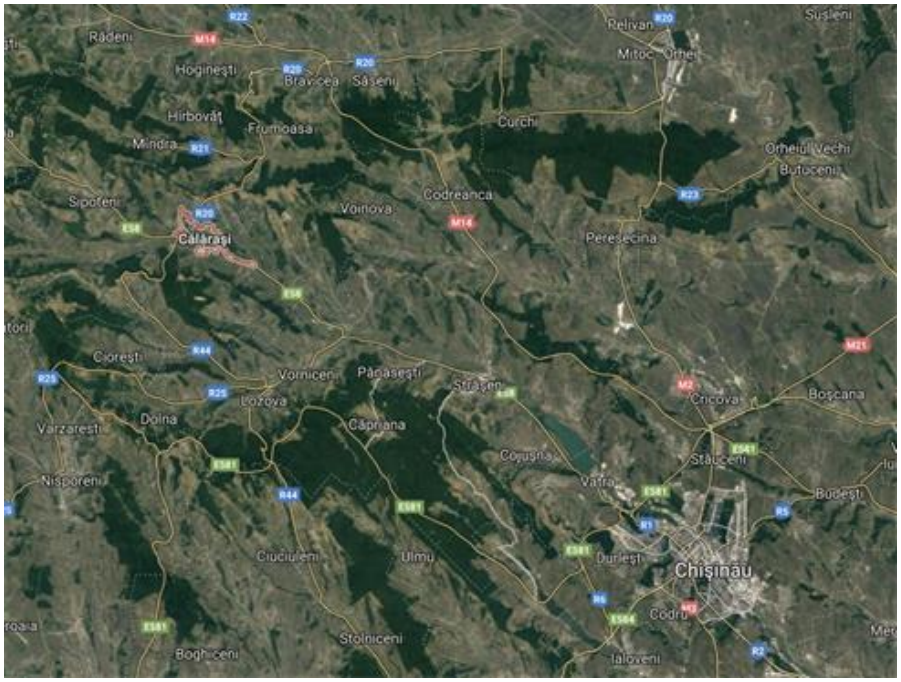
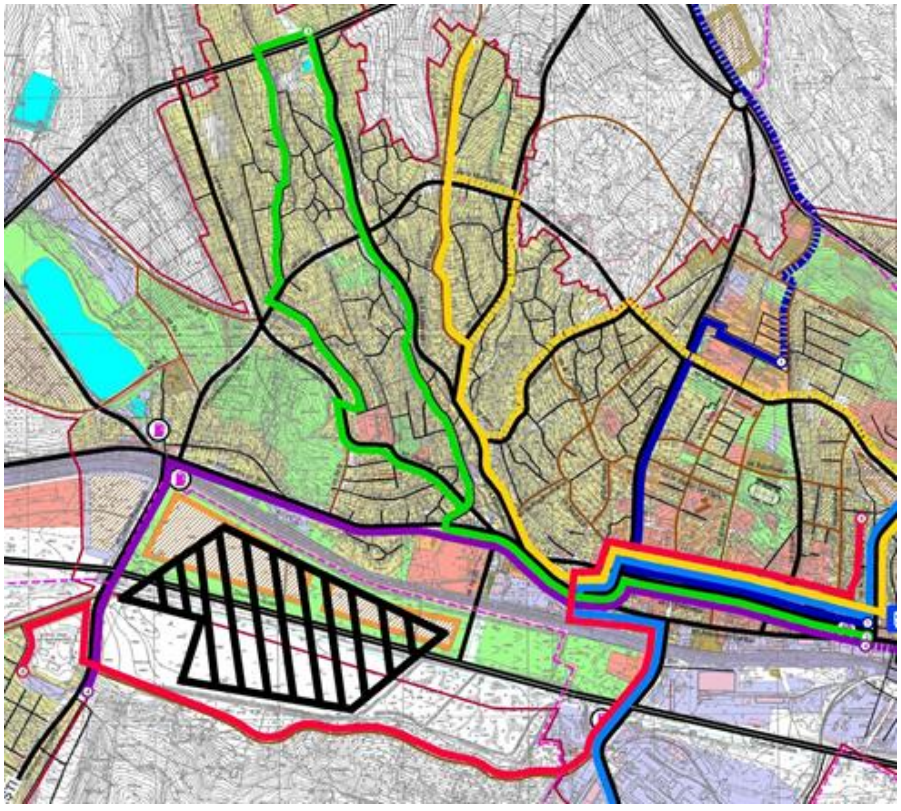


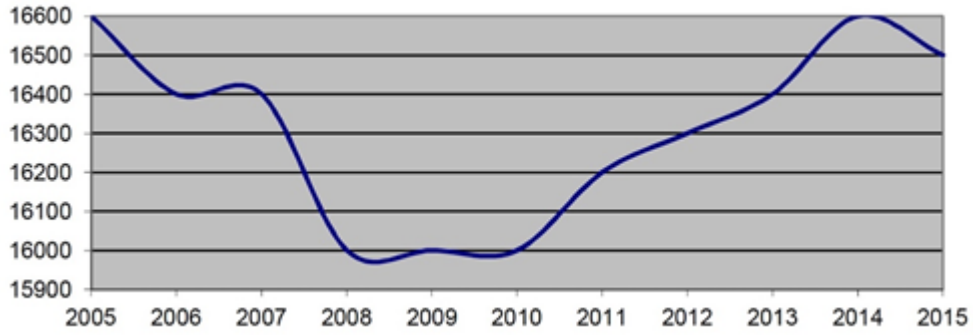
Figure 4: Main roads in Calarasi



2.2 Socio-economic profile and trends

Population:
According to statistical data, the population of Calarasi was 16.5 thousand people at the beginning of 2015. The current data of the city administration is based on approximately 16,300 inhabitants.

Figure 5: Population in Calarasi



Approximately 63,000 inhabitants live in the region of Calarasi (without city of Calarasi). Forecasts until 2030 indicate an increase of the population.

Table 1: Population forecast

age categ.	2015			2020			2015			2030		
	total	m	w	total	m	w	total	m	w	total	m	w
00-04	735	397	338	983	514	469	1048	548	500	1100	575	525
05-09	679	364	315	732	394	338	982	512	470	1057	551	506
10-14	803	406	397	692	371	321	749	403	346	1015	529	486
15-19	1333	683	650	819	414	405	709	380	329	774	416	358
20-24	2040	1051	989	1357	694	663	836	422	414	731	391	340
25-29	1382	715	667	2074	1064	1010	1383	704	679	861	432	429
30-34	1205	613	592	1405	724	681	2113	1079	1034	1423	721	702
35-39	1007	489	518	1225	620	605	1432	734	698	2173	1104	1069
40-44	1028	479	549	1019	490	529	1241	623	618	1464	744	720
45-49	1330	620	710	1025	469	556	1016	480	536	1251	617	634
50-54	1472	694	778	1313	602	711	1014	456	558	1015	472	543
55-59	1166	528	638	1416	654	762	1266	568	698	987	434	553
60-64	946	449	497	1091	481	610	1327	597	730	1200	524	676
65-69	393	152	241	843	384	459	977	412	565	1198	516	682
70-74	385	158	227	335	123	212	717	312	405	842	338	504
74-79	274	101	173	181	82	99	157	64	93	345	165	180
80-84	203	63	140	91	32	59	60	26	34	53	21	32
85-89	120	37	83	29	8	21	13	4	9	8	3	5
Total	**16500**	8000	8500	**16632**	8121	8511	**17038**	8323	8715	**17500**	8556	8944

Table 2: Population in the region of Calarasi

	2003	2004	2005	2006	2011	2015
Urban population	16.850	16.800	14.600	14.500	16.191	16.500
Rural population	64.600	64.500	60.500	60.300	62.630	63.800
Total:	81.450	81.300	75.100	74.800	78.821	80.300

Labour force:
Calarasi's potential is characterised by a developed agricultural (forestry), light industry and food production sector. The food production is one of the largest employers with >800 workers followed by light industry with >300 employees and forestry with >230 employees.

Table 3: Age structure of the population

Age structure of the population		2005	2010	2015
Population up to the working age (0-15 years)	thousands of people	2,2	2,1	2,2
Employable population 16-56 years old women and 16-61 years old men	thousands of people	11,8	11,2	22,1
Population above the working age	thousands of people	2,6	2,7	2,6
in %				
Population up to the working age	%	13,1	13,08	13,39
Employable population	%	71,3	70,07	70,82
Population above the working age	%	15,6	16,86	15,79

Education:
Currently, there are four educational institutions in the city – three gymnasiums and one primary school – with a total capacity of 2,725 students. The actual number of students is 1,770 or 65% of the total capacity. For professional education there is one college of education with a capacity of 600 students. Actually, there are 300 students.

Furthermore, there is a vocational school in Calarasi which focuses on the following specialisations:

- Textile worker
- Mechanics
- Cook.

2.3 SWOT-Analysis

The purpose of the SWOT-analysis is to identify the key factors that affect the success of the site development project under consideration. The findings which are summarised in the two subsequent tables take into account the profile of the site and the regional context as well as trends and changes in the external environment that could offer potentials or pose risks for the project.

Key strengths – such as the strategic geographic location, favourable transport links and labour force potential which has not yet been tapped by a large greenfield project – indicate positive preconditions for attracting investment. However, the necessary capital expenditure for the levelling of the site constitutes a major obstacle for the development process.

Table 4: Strengths & weaknesses of the planned investment site

STRENGHTS	WEAKNESSES
• Cost-competitive labour force at global scale (and wage subsidies – if eligibility criteria are fulfilled) • Strategic geographic location, access to industrial / academic centres (e.g. Chisinau, Balti, Ungheni) and to Romania / EU • Favourable transport links (e.g. national road and railways next to site) • Comparatively large labour force potential due to absence of labour-intensive greenfield projects • Industrial traditions in agro-processing as well as in apparel and footwear industries • Flexible offer of plots for greenfield projects with majority of utilities in close proximity • Cost-advantage through public ownership • Presence of vocational school with experience and track record in dual education • Attractive leisure / tourism environment, e.g. Codru Sanatoriul • Energy efficient kindergarten project (supported by KfW) as another soft factor and argument for the promotion	• Risk of high costs for soil works / levelling and for flood mitigation measures • Rather weak manufacturing and supplier base in Calarasi and the surrounding region • Small size of the local and regional market • Early stage of development of the innovation system • Limited skills base, no universities located in Calarasi • Proximity to ecological zone which might entail conflicts of use and limit the scope of feasible investment projects • Distance to electricity substation • Incentives less attractive than in competing locations at the international level – in particular if FEZ status cannot be obtained • Limited service-offer at site, lack of rental space • Property formation still outstanding

With respect to external factors, an FEZ status could have a strong impact on the development prospects of the site. In case of obtaining the FEZ status, the project could benefit from the corresponding incentive framework and the experience of the FEZ Ungheni which would improve chances to unlock the investment potentials. An unsuccessful application for FEZ status could hamper efforts to attract foreign export-oriented investments. Without an involvement of the FEZ Ungheni, the lack of experience and existing capacities could impede the development and management of the site. Furthermore, the competitiveness at the macro-level will play a decisive role for the success of the project and its impact on the regional economy.

Table 5: Opportunities & threats for the planned investment site

OPPORTUNITIES	THREATS
• Obtaining FEZ status benefiting from incentive framework and the experience of the management of the FEZ Ungheni • Improvements of road network (e.g. refurbishment of R1 Ungheni – Chisinau and motorway to Iasi in Romania) • Increasing attractiveness through development of industrial structure, value chains and skills base • Improving access to EU markets creating growth and investment potentials • Continuing shift of production to SEE locations • Rising labour costs in Romania leading to a growing number of relocations • Attracting export-oriented local companies to the site • Tapping innovation and relocation potential of incubator • Growth of labour force potential due to returning migrants (in particular seasonal workers in Russia) • Creation of a new technical educational institution building upon structures of the former pedagogical college • Administrative reform could integrate additional resources	• Increasing competition from other export-oriented locations (e.g. Ukraine, Albania, Macedonia) • Rising salaries reducing competitiveness • Declining labour force potential and skills base due to continuing migration • Labour-intensive projects at competing locations in the region reducing the labour force potential • Low impact on regional economy due to limited linkages and strong focus on labour-intensive projects • Limited resources of stakeholders to finance the capital expenditure for the development of the site • Lack of experience and capacities could impede the development and management of the site (without involvement of the FEZ Ungheni) • Unsuccessful application for FEZ status could hamper efforts to attract foreign export-oriented investments • Administrative reform could slow down the development process

It should be noted that despite the generally positive findings from the SWOT-analysis, the successful promotion of the site cannot be taken for granted. A systematic marketing approach will be required to tap the identified investment potentials.

3 ANALYSIS OF THE INVESTMENT POTENTIAL

The analysis of the investment potential forms the starting point for the assessment of market feasibility. Considering international experience, the demand side needs to be adequately considered in the planning and development process of investment sites. Otherwise, there is a risk that sites are developed that offer promising conditions in principle, but are not able to attract investment projects due to a lack of demand in the target groups addressed. Against this background, this chapter provides a closer look at the relevant investment trends and patterns in order to assess the chances to attract substantial and sustainable investment to the planned site in Calarasi. Furthermore, key needs and location criteria of potential investors are pointed out.

3.1 Investment potential at the international level

International investment potentials will play an important role for the planned investment site. The number of FDI projects attracted by Central and Eastern European (CEE) countries has continuously grown since 2014 according to the latest EY's Attractiveness Survey Europe. In 2016, CEE countries attracted a total number of 1,342 FDI projects, an increase by 16% compared to 2015. The number of manufacturing FDI projects in the CEE region has increased by 15% to 755. With a share of 49%, CEE countries have attracted nearly half of all manufacturing FDI projects in Europe – up from 45% in 2015. In total, 23% of all FDI projects in Europe have been located in CEE countries in 2016.

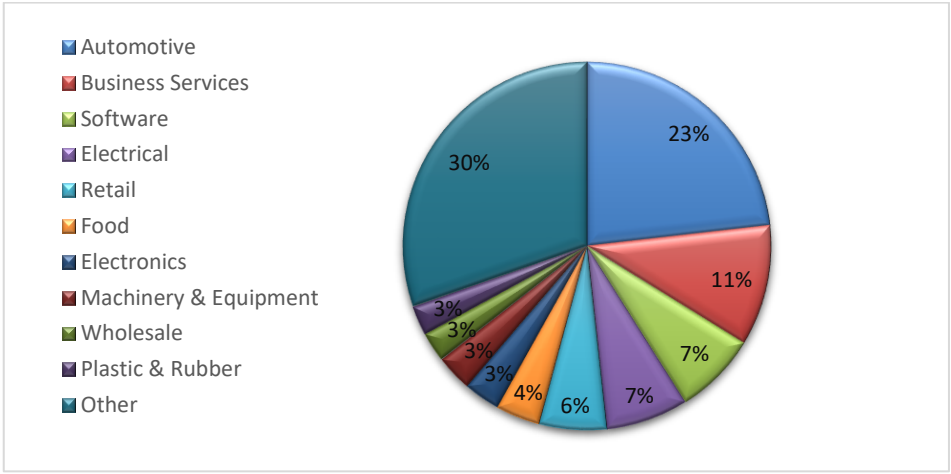
Due to the nature of FDI projects attracted, several Southeastern European (SEE) countries – including Moldova, Serbia, Ukraine and Romania – rank among the top 20 destination countries by FDI job creation in Europe. Overall, the CEE region surpasses Western Europe in the number of FDI jobs created with 135,632 compared to 124,041 jobs.

Most FDI inflows in Europe are cross-border projects by European companies. Driven by the pressure of cost optimisation, manufacturing sites tend to move east to take advantage of lower labour costs, while companies are also investing heavily in shared service centres to enhance efficiency as well as in logistics to reduce delivery times, extend market reach and optimise the flow of goods. Furthermore, SEE is garnering increased interest from Chinese companies investing in a broad range of fields including the manufacturing sector.

Trends differ by sub-regions and sectors. For instance, investors are moving up the value chain in Central Europe establishing more sophisticated service centres and IT operations in countries such as Poland and in the Baltics. At the same time SEE countries are becoming more attractive for investors in the manufacturing sector looking to take advantage of lower labour costs as labour markets are tightening in the CEE countries closer to the western market that have previously been the key destination for labour intensive manufacturing projects.

On average, 44 jobs have been created per FDI project in Europe in 2016. The share of FDI job creation by sector in Europe is shown in figure 6. The number of jobs created per project differs significantly by sector. While the automotive sector made up 6% of all FDI projects in Europe, FDI jobs created in the automotive sector make up 23% of total FDI job creation in Europe.

Figure 6: Jobs created by FDI projects in Europe by sector in 2016
(EY Attractiveness Survey Europe 2016)



3.2 Regional and local relocation and expansion potential

In addition to the international investment potentials, the site can also tap regional and local expansion potentials. According to the findings from the interviews, a number of export-oriented local companies has the resources and capacities to realise expansion or relocation projects and already expressed an interest in an investment in the site. An FEZ status would be clearly beneficial for them considering their export-oriented activities.

The promotion of the site can benefit from Calarasi‘s industrial traditions – in particular in the area of agro-processing and food production (e.g. Lapmol S.R.L.) and apparel and footwear industries (e.g. Codreanca S.A.). The production of plastic parts has been pointed out in the interviews as another area of relevance for the investment site.

A further investment potential is offered by the local incubator. SMEs that went successfully through the incubation period are likely to be in need of expansion space in the medium term. Currently, approximately 15 companies (amongst others in the metal, light and IT industries) are located in the incubator which has a size of 1,500 m².

3.3 Identification of key needs of investors

The relevance of different location criteria varies between investment projects depending upon the motive and individual company context. However, there are some common key drivers for investment decisions in the relevant target industries and segments, allowing a number of general conclusions

regarding important location decision criteria and, correspondingly, regarding the competitive position of locations aiming to attract investment from those industries and segments.

In most of the cases, investment decisions by international companies in SEE countries are driven by cost-pressure, follow-sourcing and the shift in global demand for their products. Against this background, most location decisions rest mainly on factors such as operating costs, access to customers and markets, logistics and infrastructure as well as the general business and investment climate.

In the interviews with investors and investment promotion experts, the following decisive needs of potential investors were highlighted:

(1) **Labour market potential:** As mentioned, requirements with respect to the quantity of workers and the skills profile differ depending upon the industry and type of project.

(2) **Pro-active and cooperative local government:** Investors consider this aspect in particular in the context of assessing the time and effort needed for the implementation of their project.

(3) **Road network:** Naturally, requirements are differing also with respect to this criterion depending upon the transport-sensitivity of the products and the markets / customers served.

(4) **FEZ status:** In particular, for investors that are integrated into international value chains, the FEZ status represents a major benefit.

(5) **Basic utilities connections and on-site infrastructure in place:** It has been highlighted that the site should be connected to the utilities ("We are happy to go for 100 m to get electricity to our plot, but not 3 km."), the entrance situation should be clear and an access road should be built. Furthermore, it has been pointed out that there should be a clear plan for the development of the site. In the case of an FEZ, the infrastructure for customs should be prepared.

(6) **Needs-oriented plots for investors:** The parcelling of the site should allow flexibility with respect to the specific requirements of the investment projects.

3.4 Estimates of area / labour demand

The development of investment dynamics, Moldova's track record as well as recent company enquiries in the region indicate that there are relevant investment potentials in particular in the manufacturing sector which the planned site can tap.

The table on the next page provides a forecast of the area and labour demand for the development of the planned site in the medium term perspective. It is estimated that the area taken up by 9 – 13 expected investment projects amounts to 13 – 19 ha and 3,400 – 4,800 jobs are offered by future resident companies. The demand estimates are strongly influenced by the type of investment projects attracted.

Taking into account the existing socio-economic profile as well as the investment potentials, the site is in a good position to attract labour-intensive foreign investment projects in areas – such as apparel and footwear, wire harnesses and assembly of electrical / electronic composites.[1] It is expected that foreign investors will account for the major part of the area and labour demand. It is estimated that local and regional relocation and expansion projects will take up 3 – 5 ha and will offer 600 – 1,200 jobs in the medium term.

Table 6: Estimates of area and labour demand in the medium term

INVESTMENT PROJECTS	PROJECTS (No.)	AREA (ha)	LABOUR (Jobs)
Foreign investment projects in particular in the following manufacturing industries / segments: • Agro-processing and food production • Plastic parts and components • Apparel and footwear • Composite and industrial textiles • Wire harnesses • Assembly of electrical / electronic components	7-9	10-14	2,800-3,600
Local and regional relocation and expansion projects	2-4	3-5	600-1,200
Total	**9-13**	**13-19**	**3,400-4,800**

[1] The proposed target groups are explained in further detail in section 6.3.

4 ANALYSIS OF THE COMPETITIVE ENVIRONMENT

The scope of an analysis of the competitive environment depends upon the envisaged positioning of an investment site. In this case, as an important role of foreign investment projects is foreseen, the geographic scope of the analysis needs to be widened integrating the perspective of international competition between locations – in addition to the local and regional dimension.

4.1 Competition at the international level

At the international level, which is characterised by an increasingly intense competition, Moldova is well-positioned regarding the most important location criteria and benefits from investment dynamics in the manufacturing industry. In the recent past, the competitive position of Eastern and Southeastern Europe has improved vis-à-vis the more mature Central European locations – such as Poland, Hungary, Czech Republic and Slovakia – where investors increasingly face difficulties to find qualified employees and to cope with rising salaries. At the same time, competition between locations in Eastern and Southeastern Europe has intensified. Considering the envisaged target groups in the manufacturing industry, key competitors at the international level include locations in Ukraine, Macedonia, Albania and – for companies seeking a location with a similar profile in the European Union – Romania.

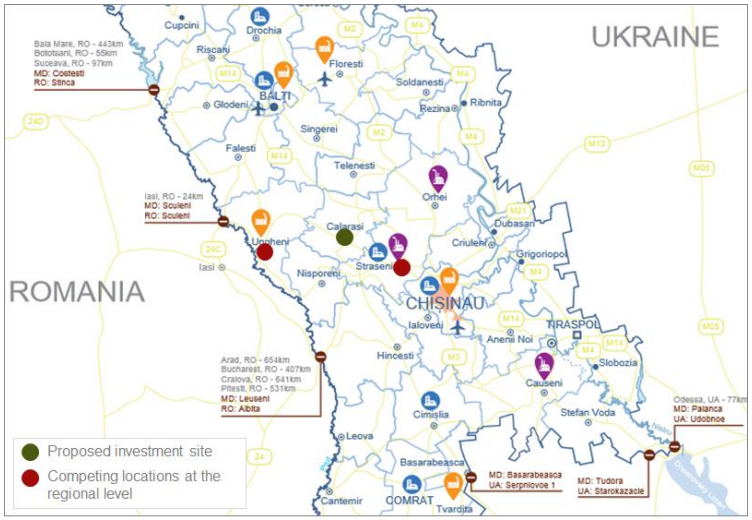
Moldova's key strengths as an investment location for manufacturing projects relate to cost-advantages, particularly the low labour costs which are highly attractive for more labour-intensive operations. Furthermore, investors benefit from the proximity to the markets of the European Union and Moldova's industrial traditions. Nevertheless, the overall state of the traffic infrastructure in Moldova as well as the limited labour force potential represent major challenges at the international level.

In comparison to many other locations in Moldova, Calarasi offers favourable transport links providing an opportunity to mitigate those general challenges. Regarding the labour force potential, the experience of the vocational school and the absence of a large labour-intensive investor can be used as arguments. However, it should be noted that a major international automotive supplier is planning an investment project in Straseni which could affect the labour force potential.

4.2 Competition at the regional and local level

Competition at the regional level is less intense. There are only a few locations in the region that are well-positioned to attract investments from the relevant target groups for the planned site. Based on the findings from the expert interviews and the research carried out, Ungheni (Free Economic Zone) and Straseni (Industrial Parks and Free Economic Zone Balti – Subzone Straseni) represent main competing locations at the regional level. The planned site can differentiate itself through a flexible offer of plots, which is catering also for the needs of larger greenfield projects, as well as through the public ownership.

Figure 7: Competing locations at the regional level
(SOURCE: Expert interviews, MIEPO)



Furthermore, the promotion of the site can build upon the argument that the labour force potential of Calarasi has not yet been tapped by a large greenfield project. However, as mentioned above, the planned investment project by a major international automotive supplier in Straseni could reduce the regional labour force potential.

The local level is characterised by a limited supply of sites and a low competitive intensity. The portfolio in Calarasi mainly encompasses brownfield sites, such as the 15 ha site of the closed canning plant or the 4 ha site of the former pedagogical college. The area adjacent to the closed canning plant also comprises vacant plots (approximately 5 ha) which could in principle be used for greenfield projects.

Figure 8: Site of the closed canning plant in Calarasi
(SOURCE: MIEPO, database of investment sites)

Still, the proposed investment site could differentiate itself through the more flexible offer of plots – in particular for larger greenfield projects. If the site can be developed as a subzone of the Free Economic Zone Ungheni, the FEZ status which is well known and received by investors would constitute a further major competitive advantage.

5 ECONOMIC AND FINANCIAL ANALYSIS

Taking into account the findings from the previous stages of analysis, the economic and financial analysis focuses on an initial development phase which encompasses the development, promotion and management of a partial area of approximately 18 ha in total.

The assessment of the economic and financial feasibility comprises the following steps which will be explained in further detail in the sections below:

- Estimation of capital and operational expenditure
- Estimation of revenues
- Cash flow forecast and analysis of selected profitability indicators (net present value and internal rate of return)
- Assessment of the contribution towards socio-economic development.

The financial feasibility of the project will be strongly affected by the amount of soil works necessary for the levelling which can be estimated more accurately only once a soil expertise has been carried out. Against this background, the analysis of the financial feasibility is based on two scenarios regarding the capital expenditure for the initial development phase.

The first scenario assumes high expenses for soil works / levelling (26.4 million MDL), while in the second scenario the corresponding expenses are kept to a minimum (13.2 million MDL). All other assumptions remain unchanged.

5.1 Estimation of capital and operating expenditure

The estimation of the necessary capital expenditure (CAPEX) forms the starting point of the analysis of the financial feasibility. Table 7 on the next page shows the estimates for the main items in constant prices. In total, approximately 48.9 million MDL of capital expenditure are foreseen for the initial phase under scenario 1 and 34.0 million MDL under scenario 2.

It is assumed that the land for the development of the site is provided free of charge by the public authorities. Opportunity costs of the land are not included. Furthermore, it is assumed that the public entities involved in the development of the site are going to finance the levelling, the off-site infrastructure, the internal road network as well as the fence and lighting system. The resident companies will be expected to cover the costs for connecting their operations to the nearest connecting point of the on-site infrastructure.

It is foreseen that the off-site infrastructure (incl. soil works) and the fence will be set up in 2019 as a first step to support the promotion of the site and to prove commitment in the eyes of investors. The expenses for construction of the buildings for customs and administration are allocated to the year 2020. However, in order to use resources efficiently, those investments should only be initiated once the first (major) investor has been attracted.

Table 7: Estimated capital expenditure (1.000 MDL) for the period 2018 – 2022

ITEM	SPECIFICATION	CAPEX (1.000 MDL)	
		Scenario 1	Scenario 2
Soil works / levelling	220,000m³ (scenario 1) or 111,000m³ (scenario 2)	26.400	13.200
Access road	10m width / 50m length		267
Site entrance	2 zinc coated gates, including electrical drives		371
Electricity	2,250m three-phase electricity line of 10kV, high voltage distribution station for 10kV		2.038
Water	1,000m polypropylene Dn=160mm, P=10bar		950
Natural gas	350m polypropylene Dn=90mm (underground) P=0.3MPa, gas sparger		618
Wastewater	Collector 27m³ volume, 150m pipe Dn=159mm		345
Fence	Galvanized 5mm steel, height of 2m, length 2,200m including pillars and concrete foundation		1.650
Internal road network	5m width / 1,000m length, 10m width / 900m length, asphalt for customs & administration zone		4.383
Video security	Cameras on perimeter and entrance including registration system and software		660
Street lighting	4 pillars of 8m height with LED luminaires 150W placed near entrance and customs building		150
Customs / Admin buildings	2 buildings 180m² and 350m² for customs / security and administration / maintenance		5.500
Planning	2.5% of expenditure items above	1.083	753
Contingency	10% of expenditure items above	4.442	3.089
Total		**48.857**	**33.974**

The further items are sequenced by year in line with the expected take up of the land by investors. The underlying assumptions are set out in further detail as part of the estimation of the revenues. It is expected that the infrastructure development for the initial phase will be completed by the end of 2022.

Deviations in the capital expenditure under the two scenarios occur only in in 2019 as shown in the subsequent tables 8 and 9.

Table 8: Breakdown of the estimated capital expenditure (1.000 MDL) for the period 2018 – 2022 under scenario 1

ITEM	2018	2019	2020	2021	2022
Off-site infrastructure	0	4.589	0	0	0
Soil works / levelling	0	26.400	0	0	0
Fence (incl. video security)	0	2.310	0	0	0
Internal road network (incl. lighting)	0	378	1.511	1.511	1.133
Customs / administration building	0	0	5.500	0	0
Planning	0	842	175	38	28
Contingency	0	3.452	719	155	116
Capital Expenditure (CAPEX)	**0**	**37.971**	**7.905**	**1.704**	**1.278**

Table 9: Breakdown of the estimated capital expenditure (1.000 MDL) for the period 2018 – 2022 under scenario 2

ITEM	2018	2019	2020	2021	2022
Off-site infrastructure	0	4.589	0	0	0
Soil works / levelling	0	13.200	0	0	0
Fence (incl. video security)	0	2.310	0	0	0
Internal road network (incl. lighting)	0	378	1.511	1.511	1.133
Customs / administration building	0	0	5.500	0	0
Planning	0	512	175	38	28
Contingency	0	2.099	719	155	116
Capital Expenditure (CAPEX)	**0**	**23.088**	**7.905**	**1.704**	**1.278**

The estimation of the operational expenditure (OPEX) forms the next step of the financial analysis. Table 10 and 11 provide a breakdown of the estimated operational expenditure in constant prices for the period 2018 – 2022 under the two scenarios.

The total annual operational expenditure foreseen increases in both scenarios over the period under review – from 755,000 MDL to 836,000 MDL (scenario 1) and 643,000 MDL to 810,000 MDL respectively (scenario 2). Maintenance expenses are assumed to be equal to 0.75% of the cumulated capital expenditure. Correspondingly, maintenance expenses increase substantially and constitute the largest expenditure item over the period under review.

Table 10: Breakdown of the estimated operational expenditure (1.000 MDL) for the period 2018 – 2022 under scenario 1

ITEM	2018	2019	2020	2021	2022
Maintenance	0	285	344	357	366
Salaries incl. social contributions	0	120	120	120	120
Marketing and travel	0	200	200	200	200
Other expenditure	0	150	150	150	150
Operational Expenditure (OPEX)	**0**	**755**	**814**	**827**	**836**

Table 11: Breakdown of the estimated operational expenditure (1.000 MDL) for the period 2018 – 2022 under scenario 2

ITEM	2018	2019	2020	2021	2022
Maintenance	0	173	310	327	340
Salaries incl. social contributions	0	120	120	120	120
Marketing and travel	0	200	200	200	200
Other expenditure	0	150	150	150	150
Operational Expenditure (OPEX)	**0**	**643**	**780**	**797**	**810**

Considering the critical importance of investment promotion, marketing expenses form another major expenditure item. Based upon the assumption of a lean organisational model, only one dedicated management position is

foreseen for the site. It is assumed that the site can be developed and managed as a subzone of the Free Economic Zone of Ungheni. This model offers promising synergy potentials. Additional expertise can be brought in as needed. Moreover, a close collaboration with the local and regional authorities and further partners (e.g. MIEPO) is foreseen allowing lean structures on the site.

The item "other expenditure" mainly relates to further services – such as security and accounting – as well as expenses for ICT and utilities for the management of the subzone.

5.2 Estimation of revenues

The analysis of the financial feasibility also takes into account the revenues generated by the promotion and management of the site. Land sales and leases as well as annual administrative fees and one-time fees for the registration (and for tender participation as well as for the business activity permits) constitute the principal sources of revenue. The revenue performance depends upon the number, size and economic characteristics of the projects attracted. The table below summarises the assumptions with respect to the number of residents and the land taken up over the period 2018 – 2022.

Table 12: Forecast of the number of residents and the size of land taken up in the period 2018 – 2022

ITEM	2018	2019	2020	2021	2022
Number of residents	0	1	5	9	12
Land use (ha)	0,0	1,3	6,6	11,9	15,9

On this basis, the revenues have been forecasted as shown in table 13 below. The total revenues which can be generated in the period 2018 – 2022 are estimated at approximately 12.9 million MDL.

The annual administrative fees represent the most important source of revenues. Taking into account the findings from the expert interviews and experience from existing free economic zones, it is assumed that one investment project attracted is on average going to generate annual administrative fees of 325,000 MDL.

Table 13: Breakdown of the estimated revenues (1.000 MDL) for the period 2018 – 2022

ITEM	2018	2019	2020	2021	2022
Land lease	0	273	1.091	1.091	818
Land sale	0	0	41	164	164
Registration fees	0	41	165	165	124
Annual administrative fees	0	325	1.625	2.925	3.900
Total revenues	**0**	**639**	**2.922**	**4.345**	**5.006**

Furthermore, it is assumed that the investors will initially lease the land plots (at a lease rate of 1.0 EUR) and will buy the land after one year – once the construction has started – for the state norm price of 0.15 EUR. The one-time fees for tender participation, registration and the business activities are calculated at 41,180 MDL per resident. All calculations are based on an exchange rate of 1 EUR = 20.59 MDL.

According to the forecasts, the revenues will increase from approximately 0.6 million MDL in 2019 to 5.0 million MDL in 2022 when all land plots have been taken up by investors. Without additional plots being developed which can be bought or leased by investors, revenues would stabilise after 2023 at 3.9 million MDL p.a.

5.3 Profitability indicators

Having determined the capital and operational expenditure as well as the revenues, this section now assesses the project's financial profitability and sustainability. Cash flow forecasts are used to calculate the financial internal rate of return (FRR) and the corresponding financial net present value (FNPV). Those indicators measure the financial performance independently of the sources and methods of financing.

The financial net present value is defined as the sum that results when the expected capital and operating expenditure of the project (suitably discounted) are deducted from the discounted value of the expected revenues. In line with the recommendations of the European Commission for the programming period 2014-2020, a discount rate of 4% is applied as the benchmark parameter for the opportunity cost of capital in the long term.

The tables on the next pages summarise the results under the two scenarios for the initial development phase as well as for a 20 year period which represents a typical time horizon for an industrial infrastructure project of this type. The comparison of profitability indicators for the two scenarios confirms the strong influence of the amount of soil works on the project's performance. According to the forecasts, the planned project would only be financially viable under the assumptions of scenario 2 (low expenses for soil works / levelling).

In scenario 1, for a 20 year time horizon, a net present value of approximately -8.7 million MDL and an internal rate of return of 1.5% are forecasted. The findings indicate that the planned project is not profitable from a financial perspective in case of substantial soil works. In scenario 2, for a 20 year time horizon, a net present value of approximately 6.1 million MDL and an internal rate of return of 6.4% are forecasted indicating that the planned project is viable and profitable – if the soil works and corresponding expenditure can be kept to the minimum possible.

It should be noted in that context, that according to the forecasts, the project is generating – under both scenarios – a positive cash flow from the fourth year onwards. This indicates, that after initial funding (e.g. by a public grant), investments to expand or upgrade the site could be financed from own resources in the medium and long term.

Table 14: Cash flow forecast (1.000 MDL) and selected profitability indicators for the period 2018 – 2037 under scenario 1

ITEM	2018	2019	2020	2021	2022	2023
Land lease	0	273	1.091	1.091	818	0
Land sale	0	0	41	164	164	123
Registration fees	0	41	165	165	124	0
Annual administrative fees	0	325	1.625	2.925	3.900	3.900
Total inflows	**0**	**639**	**2.922**	**4.345**	**5.006**	**4.023**
Operational expenditure	0	755	814	827	836	836
Capital expenditure	0	37.971	7.905	1.704	1.278	0
Total outflows	**0**	**38.725**	**8.719**	**2.530**	**2.114**	**836**
Cash flow	**0**	**-38.086**	**-5.797**	**1.814**	**2.892**	**3.186**

ITEM	2024	2025	2026	2027	2028	2029	2030
Land lease	0	0	0	0	0	0	0
Land sale	0	0	0	0	0	0	0
Registration fees	0	0	0	0	0	0	0
Annual administrative fees	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Total inflows	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Operational expenditure	836	836	836	836	836	836	836
Capital expenditure	0	0	0	0	0	0	0
Total outflows	**836**	**836**	**836**	**836**	**836**	**836**	**836**
Cash flow	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**

ITEM	2031	2032	2033	2034	2035	2036	2037
Land lease	0	0	0	0	0	0	0
Land sale	0	0	0	0	0	0	0
Registration fees	0	0	0	0	0	0	0
Annual administrative fees	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Total inflows	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**
Operational expenditure	836	836	836	836	836	836	836
Capital expenditure	0	0	0	0	0	0	0
Total outflows	**836**	**836**	**836**	**836**	**836**	**836**	**836**
Cash flow	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**	**3.064**
Discount rate							**4,0%**
Net present value							**-8.679**
Internal rate of return							**1,5%**

Table 15: Cash flow forecast (1.000 MDL) and selected profitability indicators for the period 2018 – 2037 under scenario 2

ITEM	2018	2019	2020	2021	2022	2023
Land lease	0	273	1.091	1.091	818	0
Land sale	0	0	41	164	164	123
Registration fees	0	41	165	165	124	0
Annual administrative fees	0	325	1.625	2.925	3.900	3.900
Total inflows	**0**	**639**	**2.922**	**4.345**	**5.006**	**4.023**
Operational expenditure	0	643	780	797	810	810
Capital expenditure	0	23.088	7.905	1.704	1.278	0
Total outflows	**0**	**23.731**	**8.685**	**2.501**	**2.087**	**810**
Cash flow	**0**	**-23.092**	**-5.763**	**1.844**	**2.918**	**3.213**

ITEM	2024	2025	2026	2027	2028	2029	2030
Land lease	0	0	0	0	0	0	0
Land sale	0	0	0	0	0	0	0
Registration fees	0	0	0	0	0	0	0
Annual administrative fees	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Total inflows	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Operational expenditure	810	810	810	810	810	810	810
Capital expenditure	0	0	0	0	0	0	0
Total outflows	**810**	**810**	**810**	**810**	**810**	**810**	**810**
Cash flow	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**

ITEM	2031	2032	2033	2034	2035	2036	2037
Land lease	0	0	0	0	0	0	0
Land sale	0	0	0	0	0	0	0
Registration fees	0	0	0	0	0	0	0
Annual administrative fees	3.900	3.900	3.900	3.900	3.900	3.900	3.900
Total inflows	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**
Operational expenditure	810	810	810	810	810	810	810
Capital expenditure	0	0	0	0	0	0	0
Total outflows	**810**	**810**	**810**	**810**	**810**	**810**	**810**
Cash flow	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**	**3.090**
Discount rate							**4,0%**
Net present value							**6.073**
Internal rate of return							**6,4%**

5.4 Contribution towards socio-economic development

The planned project will have broader socio-economic and fiscal effects which should be taken into account. Especially public sector organisations should be guided not only by the results of financial analyses, but should also consider other results, i.e. both the external (social) costs and benefits of a project. Against this background, the focus of the analysis is widened in this section beyond the perspective of the future owner of the industrial infrastructure.

The creation of additional direct and indirect employment is considered the principal socio-economic benefit of the project for the region. It is estimated that approximately 3,200 new jobs will be created by resident companies (excluding relocations) and suppliers within the region.

If the benefit from additional employment is integrated into the cash flow forecast and analysis of profitability indicators, the rate of return would significantly improve. Those findings indicate, that the project is effective and desirable from a socio-economic perspective. It should be noted in this context, that the project can also make an important contribution towards reducing and avoiding migration. Workers who have left in the past to work in other parts of the country or abroad can be attracted back to the region.

Additional income for the region can also be generated by the realisation of the off- and onsite infrastructure and the implementation of the investment projects of the residents as local companies will be contracted for part of the construction work.

Furthermore, the following external benefits of the project can be highlighted:

- **Additional revenues for public budgets:** Those include amongst others corporate and personal income taxes, VAT and social security contributions as well as customs clearance fees. Although resident companies are likely to benefit from tax incentives or might initially not pay corporate income taxes due to high investment costs, it can be expected that tax revenues from companies outside the subzone will increase also in the short- and medium-term perspective. Furthermore, labour-related taxes and social security contributions both from residents and companies outside the subzone will grow.
- **Savings for public budgets:** Amongst others, savings can be realised as the additional jobs offered by the resident companies result in a reduction of expenses for unemployment benefits.
- **Increasing and diversifying exports:** International experience shows that this type of project can make an important contribution towards fostering exports and developing new international markets.
- **Stimulating innovation and entrepreneurship:** The development of a needs-oriented industrial infrastructure and the attraction of foreign investment can help promote innovation and entrepreneurship in a region. Developing linkages between resident companies and the regional economy represents a key success factor in this context. A main focus should be on developing and upgrading value chains.

6 DEVELOPMENT CONCEPT

6.1 Phased approach

Taking into account the results of the different stages of analysis, a phased development approach seems advisable. Based on the results of the analyses, it seems feasible to attract a sufficient volume of investment projects and financially viable – if the soil works and corresponding expenditure can be kept to the minimum possible – to develop the infrastructure and organisational set-up for a first phase comprising approximately 18 ha.

Furthermore, the cash flow forecasts indicate that, after initial funding, future investments for an expansion or upgrading of the site could be financed from own resources – which are mostly generated from annual administrative fees.

Against this background, a phased approach seems advisable to reduce the risks and burden for the public budgets. Depending upon the performance and the development of external factors a next phase could be initiated which could also take into account the lessons learnt during the first stage. A key prerequisite for the proposed phased approach is that the land for the proposed project as well as for future expansions remains in public ownership.

6.2 Infrastructure and configuration

In order to use resources efficiently, it is recommended, to set up the off-site infrastructure (incl. soil works) and the fence as a first step to support the promotion of the site and to prove commitment in the eyes of investors. The subsequent investments (on-site infrastructure, buildings for customs and administration) should only be initiated once the first investor(s) have been attracted. In this context, the aim should be that resident companies cover the costs for connecting their operations to the nearest connecting point of the on-site infrastructure.

The proposed development model builds upon the findings from the interviews with investors and investment promotion experts which highlighted, that …

- the site should be connected to the utilities (“We are happy to go for 100 m to get electricity to our plot, but not 3 km.”)
- the entrance situation should be clear and an access road should be built.
- there should be a clear plan for the development of the site.

The subdivision and parcelling of the site should allow flexibility with respect to the specific requirements of the investment projects. The proposed subdivision and configuration which is outlined in figure 9 on the next page is aligned to the needs of the defined target groups:

- Small-scale investment projects (<300 employees) are expected to request plots of approximately 1 ha.
- Medium-sized investors (300-750 employees) are expected to request plots of approximately 2 ha.

- It is assumed that large-scale projects (more than 750 employees) take up plots of approximately 4 ha.
- Furthermore, two adjacent plots can be merged to cater for individual needs.

The zone is equipped with a territory for customs procedure, administration and security services and a territory for main technical facilities such as gas sparger, sewage pump station, high voltage distribution boards and transformers etc. In the infrastructure zone, the main handover point for all facilities are located. From here, the internal networks are starting to the land plot of the investors. All external connections to the networks from the service providers are starting from the infrastructure zone as well.

The routes of the distribution networks on the site should belong to the main road of the zone and enter the plots from the secondary roads. Each plot has access from minimum three sides: from the main road of the site and from two (or three) secondary roads. The whole territory is fenced and controlled by video surveillance. Street light is foreseen for the main road of the site.

Figure 9: Layout plan

Table 16: Size of available plots

PLOTS	SIZE (ha)
Administration, customs, security	0.3
Infrastructure	0.6
Roads	1.2
Small investment projects (4 x 1.2ha)	4.8
Medium-size investment projects (2 x 2.5 + 1 x 1.9 + 4.2ha)	11.1
Total	**18**

The following network routes from the infrastructure zone are foreseen:

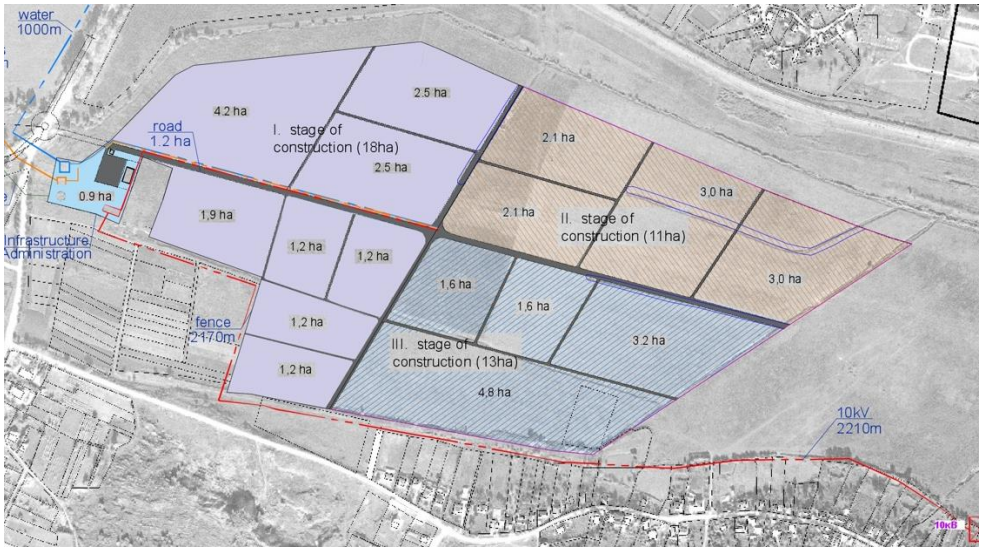
- Water: 1.000m, northwestern direction
- Gas: 350m, western direction
- Power: 2,200m, eastern direction
- Sewage: 150m western direction
- Road: 50m western direction

The nearest possible connection to the handover points has been chosen for the feasibility study.

Figure 10: External connection to the main networks

In a later stage, depending upon the performance with respect to attracting investment the zone could be extended by 24ha in the southern direction in two steps: 11ha and 13ha.

Figure 11: Future development phases



6.3 Promotion of the planned site

The recommendations regarding the promotion of the planned site are based on the following guiding principles:

(1) **Joint approach in cooperation with relevant stakeholders:** Whenever possible, investment promotion activities should be implemented in close collaboration with strategic partners and intermediaries to utilise synergies and maximise the impact. The planned brand book provides a promising opportunity for joint marketing efforts of FEZ.

(2) **The regional context matters:** In the investment decision process of companies, the regional context plays a decisive role. The search for a new location typically starts at the regional level. Furthermore, most location criteria entail a strong regional component, e.g. the labour market potential. Against this background, the regional context should be fully integrated into the argumentation and marketing efforts.

(3) **All activities and measures are consistently target-group-oriented:** Experience indicates that targeting increases the investment attracted in a competitive landscape. A target-group-oriented approach supports an efficient use of resources and a convincing argumentation.

(4) **Promoting business opportunities rather than locations:** The promotion of the planned site should take into account the perspective of investors. It should be noted that investors are not looking for locations, but for business opportunities. Therefore, the focus should be on highlighting the specific benefits and opportunities offered by the location rather than describing the location features in detail.

(5) **Investment promotion is a long-term activity:** Only a small proportion of companies is actually looking for new locations – in particular at the international level. It also takes a considerable amount of time from the initial decision by a company to search for a location until the finalisation

of the process. Decision periods of more than two years are not uncommon. A systematic follow-up and building long-term relationships represent key success factors in this context.

Taking into account those guiding principles, the recommendations on the promotion of the planned site which are set out in the subsequent sections focus on the three areas (1) target groups, (2) messages and (3) instruments and activities.

Target group definition:

Considering the existing economic profile as well as the investment potentials and competitive environment, the following target groups should form a main focus of international investment promotion efforts:

- **Agro-processing and food production** (e.g. processing of fruits and vegetables, frozen baked goods, dairy products and meat processing)
- **Plastic parts and components for the automotive industry as well as for further industrial applications** (e.g. hoses, tubes and brackets for the fluid, air flow, transmission and exhaust system)
- **Apparel and footwear** (e.g. manufacturers of menswear, womenswear, childrenswear, shoes and accessoires)
- **Composite and industrial textiles** (e.g. seat covers and airbag cushions for the automotive industry, upholstery fabrics for the transportation industry, composite materials for the automotive and further industries, insulation material, medical textiles)
- **Wire harnesses** (e.g. assembly of wire harnesses for the automotive industry and further industrial applications)
- **Assembly of electrical / electronic components** (e.g. component processing, parts wiring, finishing, assembly and testing of electrical / electronic components and equipment).

In addition, local export-oriented companies and expanding SMEs from the incubator in Calarasi should be approached. In the medium term, it could be an option to integrate property developers into the target group mix for an expansion or upgrading of the investment site.

Overall, emphasis should be placed on non-polluting investment projects – due to the neighboring ecological zone.

The figure on the next page operationalises and illustrates the target group definition on the basis of exemplary company profiles which can be used to identify further companies for the promotion activities.

Across the different product groups, the focus should be on companies which have already established (first) operations abroad. Initially, there should be particular emphasis on the German-speaking countries as well as China and Turkey. The size and internationalisation pattern of the relevant industries in those markets indicate a promising investment potential.

Defining target groups is a dynamic process. The target group definition should be regularly reviewed taking into account the results achieved, changes in investment trends and a continuous upgrading of the definition

with respect to the value addition and technology and capital intensity of the target groups.

Target-group-specific messages:

As part of the process of designing and producing the marketing materials for the planned site, the marketing theme and messages should be refined and finalised. The marketing theme addresses the general differentiating position issues. The target-group-specific messages relate to the location features which provide specific benefits to the target groups and which stand out compared to competing locations. The marketing messages are derived considering that investors generally respond to specific (profitable) business opportunities. Furthermore, they take into account, what is driving the investment plans of the target groups, so that the appropriate sales triggers can be used.

Figure 12: Operationalisation of the target group definition with exemplary company profiles

If the site can be developed as a subzone of the FEZ Ungheni, the marketing theme should contain the term “Free Economic Zone”. It is well known and received by investors highlighting a distinctive combination of strategic benefits, such as tax and duty exemptions, streamlined administrative processes and modern facilities. Furthermore, the theme should integrate the gateway function as a differentiating element. It relates to benefits with respect to the strategic geographic location and favourable transport links facilitating access to main centres within the country and region as well as to EU markets.

Against this background, an exemplary theme could be: “Free Economic Zone Calarasi: Your cost-effective gateway to serve EU and SEE markets”.

Taking into account that optimising costs and follow-sourcing form the key investment driver within the spectrum of target groups, the following main sales triggers can be derived:

(1) Untapped labour force potential – due to the absence of large-scale labour-intensive greenfield projects

(2) Competitive operating costs (in particular labour costs and land prices), plus incentives offered by FEZ status (if the site can be developed as a subzone of the FEZ Ungheni)

(3) Strategic geographic location and favourable transport links ensuring access to key centres and markets on the regional and international level

(4) Skilled and productive labour force – building upon industrial traditions and presence of a vocational school with experience in dual education

(5) Fast-track implementation of investment projects – based on planning security and efficient collaboration of key stakeholders and service providers

Those sales triggers form the base for the target-group-specific messages – e.g. in cover letters for lead generation campaigns or individual presentations.

Marketing instruments and activities:

Taking into account international experience in promoting investment sites, in the following sections potential measures and activities are outlined focusing on the three areas:

- Marketing materials (e.g. brochures & fact sheets)
- Image building (e.g. online presence, regional PR activities, events)
- Lead generation (in particular in the context of relevant trade fairs and events).

As mentioned above, investment promotion activities should be implemented – whenever possible – in close collaboration with strategic partners and intermediaries. Especially with regard to attending trade fairs and other supra-regional and international activities, initiatives should be coordinated with relevant partners in order to utilise synergies and avoid the doubling of efforts.

To prepare the implementation of marketing activities, a basic set of target-group-specific marketing materials should be developed. This includes a brochure / exposé as well as a fact sheet. The brochure / exposé can be used amongst others for events (e.g. conferences, delegation visits), individual meetings, site visits or follow-up activities. It should highlight the key messages and location-specific advantages for the targeted investor groups. The fact sheet should summarise the key messages and information from the brochure and should be developed in particular for lead generation campaigns, trade fairs or events as a hand-out.

Considering the early development stage of the site, a format that allows flexible updating, adaptation and individualisation is recommendable. The design should be aligned to the planned brand book for FEZ. The brochure / exposé should contain the following:

- A regional classification of the investment site, if possible with distances to major hubs within Europe and important transport links
- Wider development objectives of the site including target groups
- Convincing business scenarios building upon location-specific advantages (e.g. available labour force, industrial traditions, incentives)
- A location / layout plan pointing out different land plots and construction phases and, if applicable, a bird's-eye view or 3D illustration of the site for a better visualisation
- Technical specifications of the site, including amongst others area sizes of land plots, building specifications, utility connections, infrastructure for customs
- Profiles of successful investment projects should be added as soon as possible
- Contact information of key personnel and a list of relevant regional institutions that facilitate the investment process.

In order to raise awareness for the new investment site, a number of image building measures can be carried out. This includes the development of an online presence as well as regional PR activities and events.

A convincing online presence is a critical component of targeted investment promotion, as today an online search and website visit are often an investor's first introduction to a new potential site. The more relevant information is provided, the more likely potential investors are to engage further. In this sense, a website allows potential investors to find all information they need in one place. Providing useful target-group-specific information online, shows potential investors that the management and authorities understand their needs and demonstrates competence. Dedicated contacts displayed on the website provide a natural point of entry for potential investors to engage with the staff directly.

Figure 13: 3D-Illustration of Rzeplin Industrial Park (Poland)
(http://invest-in-wroclaw.pl)

In order to generate synergies, it might also be an option to embed a micro-site on an existing website of a relevant partner, e.g. MIEPO, Ungheni FEZ or a joint platform of FEZ. This way potential investors who are already interested in the region, can easily find information on the planned site.

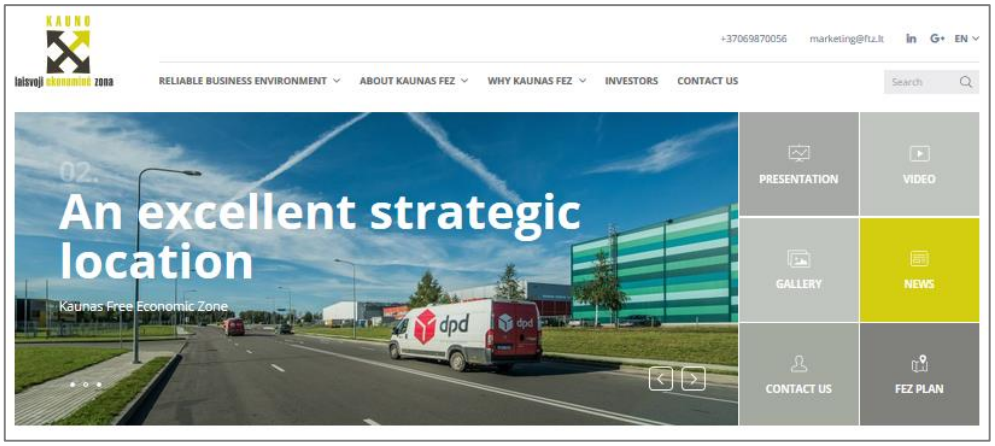
Figure 14: Brochure iPark (Ukraine) (http://ipark.info)

Key information that should be provided by the micro-site or website includes:

- General information on the investment site and location
- Target-group-specific benefits and investment opportunities
- Visualisation of the planned layout and infrastructure
- Support services offered for potential investors
- Profiles and contact information of key personnel
- News section with information on new developments and activities at the site
- Links to relevant partners and institutions (e.g. MIEPO)
- Brochure / exposé and fact sheet for download.

In addition to the micro-site or website, the use of social media platforms also represents a viable option. Twitter accounts are the most commonly used social media channel in investment promotion. A twitter account could be used to post regular updates on activities and developments, e.g. announced investment or expansion projects, events and trade fair visits, new service offers etc. By connecting the account with intermediaries such as investment promotion agencies, industry associations and other target group relevant organisations, a network of relevant followers can be developed. However, a considerable amount of time and a high level of dedication would be needed. Daily posts are necessary to keep an active and relevant profile. A twitter schedule is advisable to plan, organise and monitor the topics and messages.

Figure 15: Website of Kaunas Free Economic Zone (Lithuania)
(http://ftz.lt/)



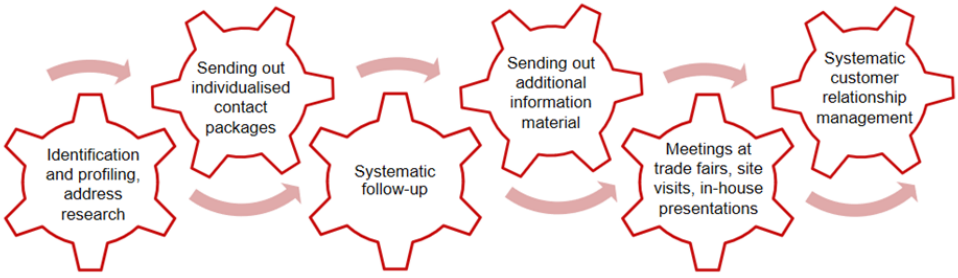
PR activities should focus on the regional and national level. As there is an ongoing trend for international companies which have already established plants in Moldova to invest in additional locations, the placement of informative articles on developments and activities at the site in regional and national newspapers as well as newsletters of trade associations and chambers of commerce are a good way to reach also this target group.

In order to raise awareness and improve the image of Moldova as an investment location, it could be considered to complement PR activities by placing adverts in collaboration with strategic partners (e.g. as a joint initiative of FEZ).

Events should only be organised in cooperation with relevant stakeholders as they are cost-intensive and only effective if a sufficient number of target companies can be reached. In order to share costs and reach a sufficient scale, a joint investment forum could be carried out together with MIEPO and other relevant FEZs. Another effective opportunity to raise awareness is utilising events of intermediaries (e.g. meetings or workshops of industry associations or chambers of commerce) as a platform for presentations on the planned site.

Furthermore, a key focus of marketing activities should be on pro-active lead generation campaigns in close collaboration with partners – such as MIEPO. Lead generation campaigns should be carried out in particular in the context of relevant trade fairs or events.

Figure 16: Overview of lead generation process



Taking into account international experience, targeted lead generation has proven to be the most effective investment promotion approach. The objective is to generate quality business leads of investors who otherwise would not have considered the location and to secure a greater quantity and quality of investment projects through relationship-building and effective facilitation. All lead generation activities should be aligned to the defined target groups.

Attending trade fairs can be an effective way to gain industry intelligence and get in touch with potential investors. Lead generation campaigns ahead of trade fairs serve to identify potentially interested companies which are in attendance and set meetings accordingly. Obtaining a booth is not necessary for a successful trade fair visit, as experience shows that potential investors are not likely to just stop by the booth and that "walking the floor" and seeking out target companies is a more promising networking technique. Meetings at trade fairs are a promising opportunity to quickly assess whether a company has genuine interest in the site.

A list of relevant trade fairs for the identified target groups is provided in the table below. In the medium term, it could be considered to integrate property developers which could be involved in an expansion or upgrading of the site into the target group mix utilising trade fairs at the regional and international level (e.g. MIPIM and Expo Real).

Table 17: Relevant trade fairs

Trade Fair	Main Focus	Exhibitors	Visitors
Anuga 10/2019 Cologne, Germany	Food and beverages	7,400 exhibitors from 102 countries, 90% foreign	165,000 (2017)
SIAL 10/2018 Paris, France	Food, food processing and packaging machinery	6913 exhibitors, 87% foreign	155,692 (2016)
Z Intern. Zuliefermesse 02/2019 Leipzig, Germany	Parts and components (e.g. metal, plastic) for the various industries	362 exhibitors from 20 countries, 26% foreign	9,950 (2017)
IZB International Suppliers Fair 10/2018 Wolfsburg, Germany	Automotive supply industry / metal components	800 exhibitors from 32 countries	49,800 (2016)
Apparel Sourcing Paris 09/2018 Paris, France	Apparel, footwear, accessoires	545 exhibitors, 100% foreign	16,200 (2016)
Munich Apparel Source 09/2018 Munich, Germany	Apparel, footwear, accessoires	200 exhibitors	20,000 (2017)
Composites Europe 11/2018 Stuttgart, Germany	Plastics and composites	420 exhibitors from 29 countries, 39% foreign	7,909 (2017)
Techtextil 05/2019 Frankfurt, Germany	Composites, industrial textiles	1,487 exhibitors from 56 countries, 71% foreign	33,670 (2017)
Electronica 11/2018 Munich, Germany	Electronic components, sensors, wires	2,912 exhibitors from 50 countries, 67% foreign	73,451 (2016)

SOURCE: AUMA trade fair database

6.4 Organisational and financing model

International experience shows that an efficient organisational and financing model constitutes a major success factor for planning, developing and operating an industrial site.

In order to reduce the burden on public budgets, a lean organisational model is recommended. As proposed in the interviews and stakeholder consultations, it should be considered to develop the site as a subzone of the FEZ Ungheni. This model offers promising synergy potentials and allows to benefit from the wide spectrum of relevant experience of the FEZ administration and thus to avoid redundancies.

A main focus of the FEZ administration could be on the following management and development functions:

- Coordinating the planning and implementation process for the preparation of the land and the development of the infrastructure and facilities
- Coordinating the maintenance of the on-site and relevant off-site infrastructure ensuring effective operation of the infrastructure and utility networks in line with the needs of the residents
- Investment promotion and facilitation, acting as a single point of contact for investors
- Registration of residents
- Developing a network of service providers to offer access to the full range of business development services in the region / country and to integrate the site into the regional economy
- Enlisting partners' support and sourcing funds in order to finance the development of infrastructure and facilities.

At the same time, it is of crucial importance that key partners – such as local and regional authorities – and their expertise are integrated to fully unlock the potential of the site for regional development. In order to ensure a high level of cooperation and coordination, it is advisable to establish a task force or steering committee in which all relevant stakeholders are represented.

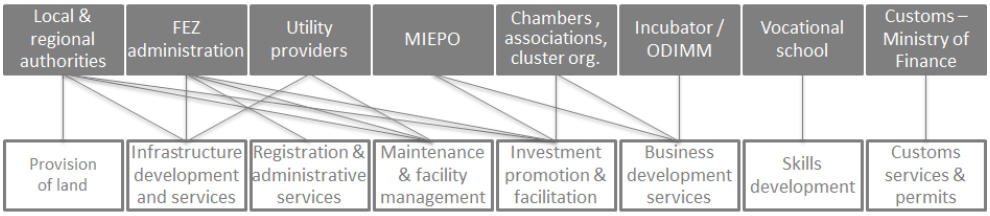
Based upon a joint initiative approach, this body could serve as a platform to jointly define strategic objectives as well as operative measures for the development and promotion of the site. Amongst others, the task force / steering committee could agree upon an integrated development plan for the site. Furthermore, it could help coordinate the delivery of complementary services, such as:

- Networking platforms
- Internationalisation and further business development services
- Infrastructure development services
- Promotion of the location and region
- Skills development
- Customs service.

So-called dispersed organisational models are quite commonly used around the globe for the development and operation of industrial sites. In contrast to the integrated model which is characterised by one designated entity being

tasked with all functions, in dispersed organisational models functions are performed by different entities cooperating closely with each other.

Figure 17: Exemplary dispersed organisational model



The financing model should also reflect the joint initiative approach mentioned above. In principle, the following main sources of finance for site development projects can be identified:

- International grants or loans (e.g. EIB loans)
- Contributions from public budgets at the central, regional or local level
- Funds from the budget of the FEZ administration
- Private capital.

Taking into account the size and profile of the planned project, it seems unlikely that international funding can be secured to finance the first development phase. Initial funding – in particular of the soil works and off-site infrastructure – will largely have to be sourced from the budgets of the municipality and the raion. In addition, it is recommendable to submit an application for funding to the Central Regional Development Agency.

Provided that the site can be developed as a subzone of the Free Economic Zone Ungheni, it seems realistic in the medium term that the FEZ administration can finance the necessary capital expenditure for extending and upgrading the site from revenues generated – in particular from administrative fees. It should be ensured, that the FEZ administration can retain and reinvest the revenues generated from resident companies. Furthermore, it is proposed that the revenues generated from the sale and lease of land as well are reinvested into the infrastructure development.

In the medium and long term, it should also be considered to involve the private sector in the expansion or upgrading of the site. Integrating private sector expertise and resources can help meet the increasingly sophisticated infrastructure and service needs from investors. In the case of the site in Calarasi, this relates in particular to the provision of rental space for industrial investors which plays an increasing role as a differentiating factor. In the short term, it does not seem realistic to find a developer for such type of project, as preference is given to locations with a proven track record of attracting investment.

In the medium and long term, however, opportunities for mobilising private sector resources may arise, once the first generation of residents has successfully realised their projects. Against this background, it should be considered – as already mentioned – to integrate property developers into the target group mix for a second phase utilising trade fairs at the regional and international level (e.g. MIPIM and Expo Real).

7 NEXT STEPS

From an investment promotion perspective, it is vital not only to analyse the feasibility of a site for industrial development but also to ensure planning security for potential investors. Against this background, as a next step, a zoning plan (PUZ) will be developed for the site under consideration building upon the results from the feasibility study.

Based upon a transparent and competitive process, a planning company has been selected to carry out the following tasks:

- **Elaborating the preliminary draft zoning plan** and explanatory note according to legal requirements as a basis for the early involvement of representatives of public interests (authorities / public utilities / associations) and participation of the public (citizens)
- **Elaborating the draft zoning plan** and contributing to the involvement of representatives of public interest and participation of the public as well as to the evaluation and balancing of comments and requirements
- **Elaborating the zoning plan and the explanatory note for final approval** by the municipality / ministry in line with legal requirements.

The project partners seek to ensure that relevant international experience is transferred and integrated into the process of elaborating the zoning plan. Furthermore, synergies with the design of marketing materials and activities will be utilised. Amongst others, it will be considered to adapt plans and supplementary visualisations of the site for investment promotion measures.

As a preparatory step, the findings from the feasibility study should be validated and specified based on a soil expertise – in particular with respect to the capital expenditure for the levelling. Furthermore, the property formation constitutes another important prerequisite for the planning and development process.

Based upon the results and the experience gained as part of this pilot-initiative, GIZ will decide – in close collaboration with the Ministry of Economy and Infrastructure of the Republic of Moldova – upon further tailored support for the three selected investment sites as well as upon a roll-out of a larger-scale programme. This could entail the provision of technical assistance to further locations in the country which offer the potential to attract substantial investment and to create sustainable employment opportunities.