REPORT REGARDING THE SECTORS, SUB-SECTORS AND JOBS THAT ACT AS A BRIDGE TO WHICH THE WORKERS IN THE METAL SECTOR CAN HAVE ACCESS

0.- INTRODUCTION

The prosperity and well-being of European citizens depend on economic players and workers adapting rapidly to the current far-reaching socio-economic changes, which are translating into the creation and development of new economic activities, but also into the contraction, or even disappearance, of existing activities and the related jobs.

At the same time, the restructuring of enterprises often entails costs that can be very high, not only for the workers concerned but also for the local or regional economy. The preservation of social cohesion, which is a distinctive characteristic of the European social model, requires the introduction of accompanying policies designed to reduce the social costs to a minimum and to promote the search for alternative sources of jobs and income.

As the Commision says, "*…It is essential to ensure that restructuring is well-managed so as to meet a two-fold economic and social requirement. It is vital for enterprises to adapt to change: if enterprises conduct these operations rapidly, their competitiveness can be preserved and enhanced. Moreover, the intention to preserve the employability of workers and to facilitate their transition to another job of equivalent quality has an economic impact by taking advantage of one of the main competitive assets of the European Union, namely the quality of its workforce, which is the guarantee of future growth. In addition, restructuring must form part of a long-term vision of the development and direction of the European economy in order to ensure that the changes really are a way of strengthening its competitiveness*". [1]

Small and medium-sized enterprises (SMEs) are a major component of the European economy. The EU's 23 million SMEs constitute 99% of all businesses and account for up to 80% of jobs in some sectors, such as textiles, construction, metal…..

[1] COMMUNICATION FROM THE COMMISSION. Anticipating and accompanying restructuring in order to develop employment: the role of the European Union. (Brussels, 31.3.2005)

Although their base is local or regional, SMEs, just like large companies, must adapt to factors such as increasing international competition, movements of capital and its globalisation, the speed of technological change and the rapid cyclical shifts which characterise modern economies. However, in dealing with these transformations, they do not have the same support structures, in terms of either financial or human resources, as large companies. What is more, the changes affecting them are largely unknown.

In this scenario, inside the Metal Sector, characterised by a long tradition and experience, but lacking, as above said, from innovation and production systems to compete in the same conditions, there is an horizon of opportunities to face this adaptation: identify, first of all, its staffs' know how and the specialists in the sector, to valorise it later to be transferred to another sectors (inter-sector restructuring) or sub-sectors (intra-sector restructuring) and to more specialised and competitive activities. We have to enable the company's restructure to an alternative source of income, in a quicker and more efficacious manner, taking profit of the knowledge available.

To contribute to solve this problem, the present report, in the framework of REINFORCE METAL COMPETENCES project, the is aimed at researching the industrial sectors (and sub-sectors) and the jobs the professionals in the industrial sector might have access, in order to favour the employability of human capital, its professional mobility and the flexibility of the industrial organisations.

The REINFORCE METAL COMPETENCES, leaded by the Federación Vizcaína de Empresas del Metal (Biscay Federation of Metal Companies), is financed by the European Commission in the frame of the Second Stage of Leonardo da Vinci Program in order to help improving the quality and innovation of practices, institutions and vocational education and training and it is developed during 2007-2009 in a coordinated manner in Spain, Sweden, Lithuania and Romania.

1.- PROBLEM ANALYSIS

The restructuring of enterprises is often seen to be an essentially negative phenomenon, and its immediate effects on employment or working conditions are highlighted in most cases. And yet, restructuring operations are often essential to the survival and development of enterprises. It is therefore necessary to accompany these changes in such a way as to ensure that their effects on employment and working conditions are as short-lived and limited as possible.

The reorganisation/transformation of an activity may involve changes in organisation, introduction of new working methods or manufacturing processes, relocation of all or part of production, an increase or reduction in manpower, closure of an establishment or part thereof, creation or disappearance of a legal entity, or a merger/acquisition. The labour market is affected by such reorganisation, and its proper functioning is essential in order to ensure the transition from one type of job, sector or function to another, in a manner that is satisfactory to workers, enterprises and territorial authorities.

Restructuring is the form taken at enterprise level by the permanent reshaping of the fabric of production under the effect of numerous factors.

The development of the European single market and the opening-up of economies to international competition represent new opportunities in terms of economic dynamism and competitiveness for enterprises and the creation of high-quality jobs. Thus, in general, competition on the EU's internal market promotes prosperity and lasting employment, since it is the main driving force behind innovation, the creation of new products and services and economic renewal.

Technological innovation also triggers restructuring. On the one hand, the spread of the new information and communication technologies is making international trade and the coordination of production faster and very cheap, while generating new applications that produce more creative and higher-quality jobs. On the other hand, the development of new manufacturing processes and production methods is creating a move towards high-quality jobs requiring other types of training. Ecological innovations, as well, are creating new job opportunities and improving our social well-being.

The development of the regulatory framework (the introduction of new regulations or deregulation) is resulting in changes on product and labour markets.

Major changes in consumer demand are occurring as a result of, among other things, the new needs of an ageing population, greater sensitivity to environmental issues or changes in the geography of world demand.

The reconstruction of the fabric of production entails permanent adjustments[2]:

- Quantitative aspects: the adjustments lead to a new distribution of workers across production activities and services. Indeed, Europe is continuing to create jobs: 30 million net jobs created between 1977 and 2002, with an increase of more than 44 million in services and a loss of at least 7 million in industry and 7.5 million in agriculture. Every year, 10% of European enterprises are set up and destroyed. It is estimated that between 5 000 and 15 000 jobs are created and destroyed every day on average in each of the Member States.
- Qualitative aspects: the tendency in Europe is to move towards higher-quality and more productive jobs in certain sectors. Between 1998 and 2003, Europe (EU-15) experienced growth in the employment rates of the three categories of workers (+2.2% for low-skilled workers, +14.2% for workers with intermediate skills and +25.1% for high-skilled workers). However, the proportion of low-skilled workers in total employment fell.

Workers do not automatically move from one sector to another. The disappearance of certain particularly dangerous, arduous or polluting jobs can be seen as something positive if they are offset by new ones. However, the new jobs that are created are not necessarily taken up by the people who have been made redundant because the location and the skills required are not necessarily the same in the two cases.

These changes hit the most vulnerable population groups, especially low-skilled workers, particularly hard. The capacity of the European Union to maintain a supply of satisfactory jobs for these workers is decisive for social cohesion.

Moreover, apart from this permanent process, shocks linked to technological breakthroughs, developments in trade and state policy decisions can have a dramatic impact on certain industries and/or certain regions in terms of the destruction of human capital and the reduction of growth potential. These

[2] "Restructuring and employment. Anticipating and accompanying restructuring in order to develop employment: the role of the European Union" Brussels, 31.3.2005

negative consequences can be mitigated if the state authorities take appropriate action and there is effective coordination of the players concerned.

Restructuring assumes different forms:

- Inter-sectoral restructuring: between major sectors (agriculture, industry and services)
- Intra-sectoral restructuring: which takes place within each sector or alters its contours.
- Restructuring at enterprise level: where different types of restructuring can take place (changes in the production process, outsourcing, relocation, closure of sites, workforce cuts, mergers/acquisitions etc.). Reorganisation of production at enterprise level is an integral factor in companies' strategies, be it national or international, and in their integration in the segment of the market that they are operating in.

2.- OBJECTIVE AND METHODS SUGGESTED

2.1.- OBJECTIVE

Know the industrial sectors, sub-sectors and jobs with activities that can be transferred, to contribute to enable the employability of human capital, its professional mobility and flexibility in industrial organisations.

2.2.- SUGGESTED METHODS

- The coordinating organisation suggests methodological guidance to gather information and to organise it as an output document. Agreement about this methodological guidance. This guidance will include:
  - Conceptual starting elements
  - Guidance on the sources of information
  - Structure of the grid for the elaboration of the resulting documents.
- National analysis: survey of "restructuring" practical cases and experiences that have taken place in the different countries, through the key informants in the world of the SMES as well as from other players, experts in the matter. Gathering and treating information according to the agreed methodological guidance.
- Issuing national results: according to the agreed report structure.
- Once one company that has undergone a restructuring process has been selected, the coordinating organisation suggests some tools to gather information, helping determining the "bridge" activity, that is, the one that favours access to employment in the Metal sub-sectors and in the same time allows mobility to other sectors (building, automobile...) and the processes it includes.
- Issuing transnational report about the different "bridge" professional activities selected by the SMES in the partner countries, elaborated by the coordinating organisation, basing on the national reports and the process diagrams.

3.- CONCEPTUAL CONTEXT

In the first transnational meeting held in January 2008 in San Sebastian and after a reflection with the group of partners taking part in the project, some agreements were reached about the key concepts for our research. The definitions agreed, which we show below, do not have as an objective that of becoming universal definitions, but they constitute common guides on which to develop the research, allowing modifications or specifications that are proper throughout the project.

Next, there are some key concepts together with the definitions agreed in the first transnational meeting:

METAL SECTOR: Group of productive activities in industrial sub-sectors that, for our project, includes:

- Metallurgy
- Manufacture of metal products
- Industry of building machines and mechanic equipment
- Manufacture of office machines and computing equipment
- Manufacture of electric machines and materials
- Manufacture of electronic material; Manufacture of radio and TV equipment and appliances
- Manufacture of medical-chirurgical equipment and instruments; precision, optics and clock making.
- Manufacture of motor vehicles, trailers and semitrailers
- Manufacture of other transport material
- Vehicle reparation
- Motorcycle reparation

SME: “Any organisation, no matter its legal form, practising an economic activity, which employs less than 250 people or has a yearly business volume lower than 50 million euros (European Commission)
We consider as a small company the one employing below 50 workers (ILO)

LEARNING SYSTEMS

- Livelong Learning: Livelong learning is every learning activity done throughout life in order to improve knowledge, skills and/or qualifications for personal, social and/or professional reasons.
- Formal learning: The one that is developed in education and training centres and leads to getting recognised diplomas and qualifications.
- Informal learning: The one that is a complement of daily life, it is not necessarily intentional and therefore, it might not be recognised by those concerned as positive for their knowledge and aptitudes.
- Not formal learning: The one that is parallel to the main education and training systems and does not usually give formal certificates. It can be acquired at the working place or by means of activities from organisations and associations.

NATIONAL QUALIFICATION AND VOCATIONAL TRAINING SYSTEM: It is the group of tools and performances necessary to promote and develop the integration of vocational training offers, as well as the evaluation and accreditation of the corresponding professional competences, so that the people's professional and social development is favoured and the needs of the productive system are covered.

QUALIFICATION: A qualification is reached when a competent organisation determines that one person's learning has passed certain level of knowledge, skills and competences.
The level of the learning results is confirmed by an evaluation process or by passing a training program. Learning and evaluating a qualification can occur through a training program and/or by working experience.
A qualification provides official recognition with value for the labour market and for education and training. A qualification can give right to practise a job (European Qualification Framework).

COMPETENCE

At the transnational meeting, we agree to adopt the concept of competence from Guy LeBoterf, thus, we can understand competence as the:

"*Ability to mobilize and correctly use in determinate working environment, one's own resources (skills, knowledge and attitudes) and environment resources to produce a defined result* ".

In this definition, the following elements are outstanding:

- Working environment: the competence is always used within a precise context or situation, from which it is not independent.

- Ability to mobilize: the competence involves the mobilization of resources. One person might have these resources but not mobilize them. In this case he/she would not act with competence.

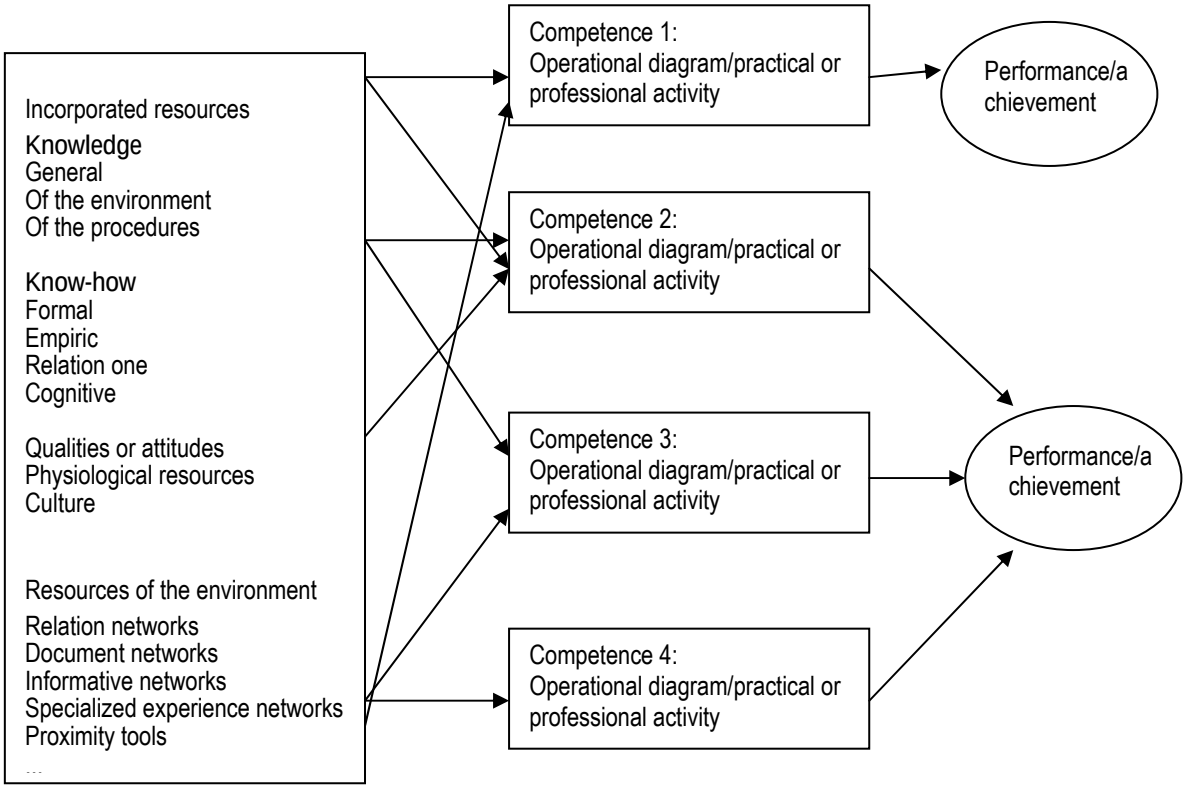
- Own and environment resources: the person mobilizes both the resources incorporated to him/herself (knowledge, know-how, attitudes, experiences) and resources from the environment (relation networks, tools, data bases…) The individual is equipped with both kinds of resources, equiSMEnt that "constitutes assets that can be more or less developed and used"

- Producing a pre-established result: the competence exists when it is used to obtain something, a defined objective or result. The extent to which this result is achieved according to previously established criteria will be the measurement of the competence of the person.

This approach of the competence integrates in itself an approach to quality, as acting with competence involves to act with quality, that is, to give added value to the action. The develoSMEnt of the added value of the competences allows the worker to be more competent than what is basically required for the job.

In this definition there is a clear distribution of the resources and the activities to be carried out with competence; between competence and activity. It is possible that for one activity the use of one competence is enough and that for another, the use of several competences is necessary. The same knowledge and/or skills can be necessary for different competences

Chart 1: Diagram of competence according to Guy Le Boterf



Source: Guy Le Boterf, *Ingeniería de las Competencias* (*Engineering of Competences)*, Ed. Deusto, 2000, pag. 53.

BRIDGE COMPETENCE: A bridge competence is one that favours access to employment in the Metal Sector (in different sub-sectors: metallurgy, metal products manufacture, electric machines and material manufacture), also allowing mobility to different sectors (building, automotive…)

PROCESS*:* Group of activities mutually interrelated or interacting that change incoming elements into results. Each activity is a group of operations contributing to an observable result (ISO 9000:2000).

4.- INTERVENTION METHODOLOGY (Appendix 1: Methodological guidance)

The intervention methodology is agreed in the first transnational meeting and it is adopted from international agreement basing on the working proposal elaborated by the coordinating organisation. Therefore, a double analysis of sources of information was decided:

- General analysis of the companies "restructuring" situation
- Deep analysis in companies that have undergone a "restructuring" process.

Below, the objective, methodology and results of each of these stages are described.

4.1.- GENERAL ANALYSIS

Objective

The research is aimed at gathering general information about the sector and the restructuring situations that are happening, as well as their characteristics. The purpose of getting this information is to draw a reference framework to develop the project.

Method

The research is started from "restructuring" *experiences / practical cases* that have happened in companies in the different countries. There is the option of completing it with bibliographic reference, if there is any, as it is a relatively new phenomenon.

Each country searches and identifies 2-3 practical cases of national companies in the metal sector that have undergone a "restructuring" process, that is, that have transformed their activity in a different sub-sector (intra-sector restructuring) or sector (inter-sector restructuring). In the Spanish case, the promoter organisation (FVEM) and AEGA partner have previously charged of selecting the SMES taking part in the project. In each case, a "Company descriptive file" is filled in containing the following information:

- Name of the company
- Sub-sector: metallurgy, automotive, building…
- Age
- Representation: local, national, international
- Present main activity (restructured) / new activity/es
- Previous main activity/es
- Staff: nº and clasification
- Clients (tipology)
- Strategic partners

Second, information is gathered through key informants: 2-3 experts per country, basing on a schedule agreed by the entire Partnership. In it, there are, first, general questions about the sectors and the activities that are the most sensitive to being transferred to other sectors and sub-sectors; and second, some questions addressed to the concrete restructuring process that has taken place in the company: conditions that existed previously to the restructuring process: internal, external causes, reasons...; how the transformation process was carried out, steps, problems they had to face; and the results or consequences of this process in the company.

Criteria to select the sources

The criteria followed to select both the practical cases and the key informants are agreed in the first transnational meeting.

- Regarding the previous cases, it is agreed that the restructuring in the companies has occurred recently and that they belong to the industrial field, more concretely to the above mentioned sub-sectors, in the conceptual context.
- Concerning the experts selection, the criteria for the selection: key informants in companies (responsible, HR), social agents, representatives of prospective observatories, training technicians...

Used sources

The sources used by the Association are the following:

	COMPANIES THAT HAVE UNDERGONE RESTRUCTURING PROCESS	KEY INFORMANTS
SPAIN	- PROIEK HABITAT & EQUIPMENT - Anza Mantenimientos	- D. Joseba Sagastigordia, PROIEK (Habitat&Equipment) director manager - D. Eliseo Paredes, Anza Mantenimientos director manager - D. Javier de Miguel, Innogune Confederación Empresarial de Bizkaia manager - D. Angel Etxabe, Saiolan technical - D. Armin Isasti, Saiolan manager
LITHUANIA	- UAB Hi-Steel - UAB METGA METAL	- UAB Hi-Steel manager - UAB METGA METAL director manager
ROMANIA	- SC MECANICA SA MÎRŞA - GRIRO SA - Mecanica Fina SA	- SC MECANICA SA MÎRŞA manager - GRIRO SA director manager - Mecanica Fina SA director manager
SWEDEN	- Säve Nya Mekaniska Verkstad AB - Bomek - Allan Johansson & Co Mek Verkstad AB	- Tibor Hatala, Senior Adviser at QMA, Quality Management Advisers AB - Kenneth Sundin, Senior Adviser, SMEbox/SME Academy AB - George Vlaescu, Company Manager, Emmerce EEIG - Anna-Kaarina Mörsky, Company Manager, Noesis CMI AB - Kennet Lindquist, Company Manager, STPKC AB

Source: Own elaboration.

Results (Appendix 2: *Company descriptive file and interviews results)*

Before describing the main conclusions from the interviews in the project context, it is necessary to say that a restructuring process in a company, as it is being considered in the project, is extremely complex and plural (especially if we take into account companies from different European countries, with different economies). For this reason, offering a general and global answer to the main professional activities that can be transferred to other sectors and sub-sectors is not feasible, as each case is particular and depends

on its casuistic. In the following section and in the appendix, where the whole interviews appear, we can see the answers each company has given regarding its specific process (activity change).

Nevertheless, an effort will be made to take and select the most general information about the restructuring process itself allowing making a comparative analysis about: the strong and weak points the company had when facing the restructuring process, how it solved the problems it found during it and how this restructuring of the activity has influenced its results.

Thus, when the companies are asked about the external and internal causes (threats and weaknesses) and the strengths and opportunities they had to start the activity restructuring process, they answer as follows:

THREATS	OPPORTUNITIES
- Changing technology - Difficulty in controlling the cost of the raw materials (stainless steel) - Lack of regular clients - European restructuring measures and financial policies - Increasing competitiveness - New environmental measures	- Contacts with the suitable people - The moment was suitable - The appropriate technology - Support of administration to energy saving, renewable energies... - Promotion of stainless steel - External contracts in specialised works - New collaborations with new markets - Enlarging exports markets - Competence to implement a system of quality control, - Relatively cheaper workforce. - Opportunity to invest in equipment.

WEAKNESSES	STRENGTHS
- Lack of knowledge of languages (due to the enlargement to new markets) - Lack of experience in the new sector - Great support on sub-contracts - Lack of experience to work in foreign markets - Products quality (not enough quality control system) - Resistance of the staff to change (workers and intermediate managers) - Lack of competences (mainly in the workers) - Obsolete equipments (lack of investments) - Lack of training	- Personal interest - Curiosity - Belong to a great industrial group - Focus production on the high range - Work from the trade mark concept - Competent and expert workers - Competences for the intermediate management - Flexibility of the company to produce different metal products - New mind of direction - Well trained workers on concrete technologies and production activities

Source: own elaboration.

Once the restructuring process has been started, the main difficulties found were:

- The language (mainly English)
- Lack of expert workers knowing the new activity
- Not implementation of a quality control system
- Resistance to change by the workers.

As we can see, most of these difficulties are due to the openness to new markets, with all it involves. It is worth underlining that both the problems and the solutions (detailed below) to them have many common points in the different cases surveyed.

And the different solutions adopted to solve these problems were:

- Modernisation of the equipment
- Training the workers to develop new competences
- Certification and development of a system of quality control
- Special internal training taught by foreign specialists from the collaborating / partner companies
- External hiring of professionals
- Sub-contracts.

After having carried out the restructuring all the companies surveyed admit that this change has influenced positively both the production, competitiveness and their workers.

- Competitiveness: enlarging the export markets. Possibility to collaborate with new and different sectors
- Production: production increase; more efficient and with more quality. Flexibility
- Workers: more competent and focused on quality; better work organisation; more motivation; the workers' activities and minds (coming from the previous activity) get updated thanks to the new incorporations.

4.2.- DEEP ANALYSIS

Objective

The objective of this deep analysis in each company refers to:

- Identify the professional activity which, depending on the company, has constituted a basic role in the restructuring.

- Disaggregate this activity into processes; considering process as *"The group of activities mutually related or interacting which transform incoming elements into results. Each activity is a group of operations contributing to an observable result"* (ISO 9000:2000)

Method

This part is carried out in different steps:

1) Each country selects one of the studied companies to focus the research from now on.

2) We proceed to carry out semi-structured interviews with the key informants (managers with experience in the company) and visit to plant. These are carried out by means of a semi-structured schedule with open questions. This method of performance allows the interlocutor to explain freely his/her opinions, without any limit, as well as leading the interview towards our objective following the same behaviour line.

We will proceed to interview between 2 and 4 interlocutors per company in the different countries and at least 1 visit to plant. The interview is focused on determining the "bridge" activity, that is, the activity the company has basically supported on to carry out its restructuring and seeing the processes that intervene

on it. The interview is focused on the disaggregation of this activity into processes. *The guidelines for the dissection into processes are the following:*

- The activity dissection into processes is carried out following the product / client line. That is, which operations are done to elaborate the product or service?

- The activity dissection into processes should include 100% of the activity.

- The approach is carried out no matter the specific organisational or quality model in the company.

- The dissection should lead to a number of processes not over 15, nor below 7.

3) From the information gathered from the interviews and visit to plant, and after the company has selected the *bridge* activity, we proceed to elaborate the hypothesis to dissect the activity into processes: "*process diagram hypothesis in the sector*". Besides, for each process, a file will be done with the following information:

- Incoming product
- Outgoing product and
- Main activities

4) Using the different "process diagrams" and "process files" as precursor documents, we proceed to integrate the information to get a hypothesis of process diagram, to validate it later with the company and introduce the necessary changes.

Criteria to select the sample

The criteria to select the companies are the following:

- Number of companies: Selection of 1 practical case per country. The analysis started in this stage is quite complex and requires several visits to the company, so we consider unanimously that to make a quality research, the deep survey of one company is enough.

- Features of the companies: due to the fact that the deep analysis requires much contact with the company and to have tight collaboration relations, we decided that each country could choose freely the company to work with, depending on the interest of the company in the process, possibilities to get information, good relations... more than because of the nature of the specific activity of the company.

Features of the sample

Basing on the above mentioned criteria, in the following chart appears a summary of the selection of the companies collaborating in the project in each country.

COMPANIES				
	SPAIN	LITHUANIA	ROMANIA	SWEDEN
Company name	PROIEK HABITAT & EQUIPMENT http://www.proiek.com	UAB "METGA" (JOINT STOCK COMPANY)	SC MECANICA SA www.mecanicafina.ro	LB:s Mekaniska Verkstad AB
Subsector	Light industry (furniture)	Production of metal products as per orders	Machinery construction (high precision tools)	Mechanical shop
Age	Since 1999 = 9 years	Founded in1993	Founded in 1923	43
Representation: local, national, international	local, national, international	VESTAS AIRCOIL AS (DENMARK) - 25% of turnover PROPIPE OY (FINLAND) - 5% of turnover DAPEX AB (SWEDEN) - 7% of turnover LITHUANIAN COMPANIES - 63% of turnover	National and international	Regional
Previous main activity/es	Inox sheet transformation for	• Metal processing (cutting, stamping,	Wider production of spare parts for	Turn, grind and welding metal

	recovering electrical appliances	welding, turning, grinding, milling). • Production of standard metal products, designing and production of non-standard products and their components. • Production of standard rubber products. Metal coating with rubber. • Powder painting	railway companies, medical equipments, aviation (different sub-sectors)	components according to costumer design
Present main activity/es (restructured)	Proiek is a company that is devoted to design and manufacture urban furniture, to architecture works and unique designs, working as main material stainless steel.	• Metal processing (cutting, stamping, welding, turning, grinding, milling). • Production of standard metal products.	Main producer in Romania of control and measuring tools, milling and latheing tools, perforation and threading tools, debiting, hadnd and fixtures.	Turn and grind metal components according to costumer design
Nº staff	50	55	490	50
Staff classification	Engineering: 11 Commercial: 7 Administration: 5 Boilermarkers, welders, installers professionals: 27	Management (top management, accounting, heads of departments) Skilled workers Workers and helpers	The company has over 50 engineers and 30% of the staff is post high school/university graduate (ISCED 4 or higher)	Managers 5
Clients (tipology)	Public institutions and construction companies (private projects)	Manufacturing companies (many kind of industries) Building companies Trading companies (wholesalers)	Metal industry representatives.	Gas turbine industry, Diesel Motor industry, Power line (automotive), Telecom industry, Medical Equipment
Strategic partners	No	VESTAS AIRCOIL AS (DENMARK)		Major costumers
Comments	To make the change of activity they based mainly on outsourcing and subcontracting.	Company was restructured after privatisation and started several new additional activities. Personnel was changed or retrained.	SERGIO MOLLO, unique adminstrator. Commercial partnership with the following companies: Borletti Galileo Microtecnica OKM IM La Prora Wemex Tavolazzi Iori Irazola Murtra Asturo Schmalkalden Potisje LTF	

Source: own elaboration.

Results: Process map of the transferable activity in the studied sector/s

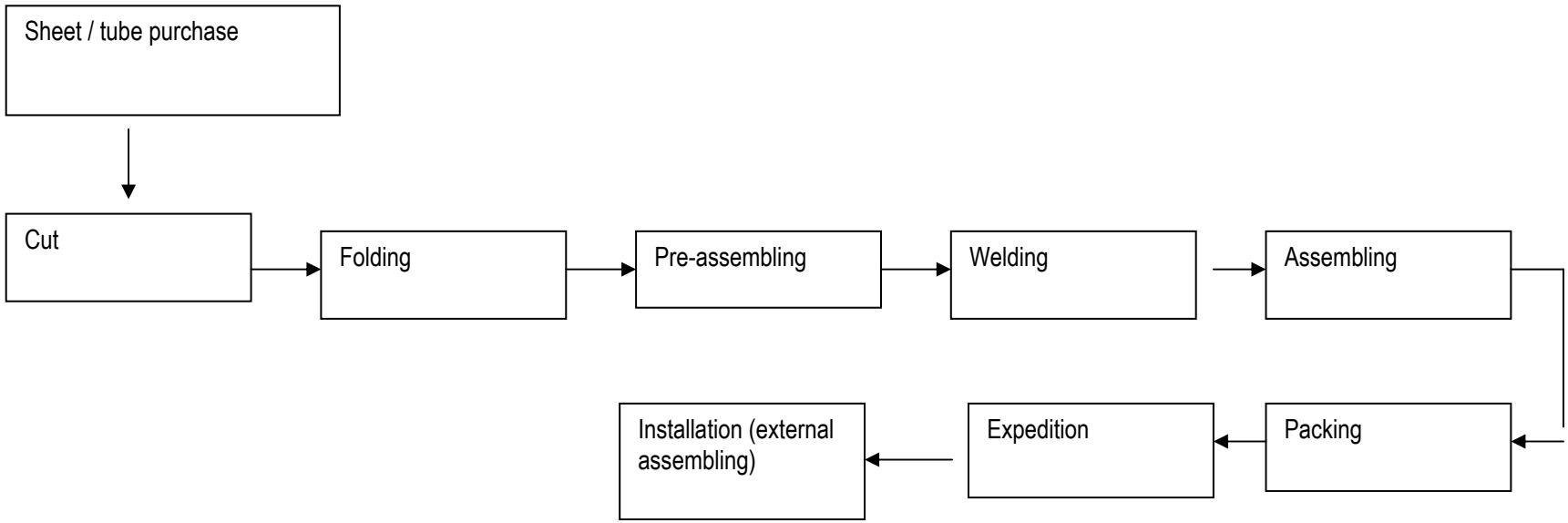
As a result of the fieldwork with companies, we have four *bridge* activities, selected by the SMES, with its four process diagrams, one for each *bridge* activity. Below, in the following chart appear the bridge activities (in Spain and Romania they are the same) to base our research from now on, with the processes included in each one.

	BRIDGE ACTIVITY SELECTED	Nº OF PROCESSES	PROCESSES TIPOLOGY
SPAIN	SHEET TRANSFORMATION	9	Sheet / tube purchase Cut Folding Pre-assembling Welding Assembling Packing Expedition Installation (external assembling)
LITHUANIA	Designing and manufacturing of the new diversified products requiring specialization of activities and constant adaptation to the needs of different customers	8	Manufacture order (design, specifications) Desing and production of stamps Machining Assembling Painting Control Packing and labelling Loading and dispatch
ROMANIA	SHEET TRANSFORMATION	9	Semifinished aluminium materials purchase Casting under pressure Removing burrs Drilling Abrasive cleaning Ground coat preparation Electro-static spray painting Storing Installation (final assembling)
SWEDEN	PROCESS ANALYSIS	10	Preparation for engaging workforce Conducting preliminary discussions Identify staff structure/ roles in process chain Prepare for interviews and observations Initiate observations, interviews and reviews Measurement and assessments Analysis of process, failures and flaws Evaluate readings and analysis findings Process captured data and visulize Results documentation and presenation

Source: own elaboration.

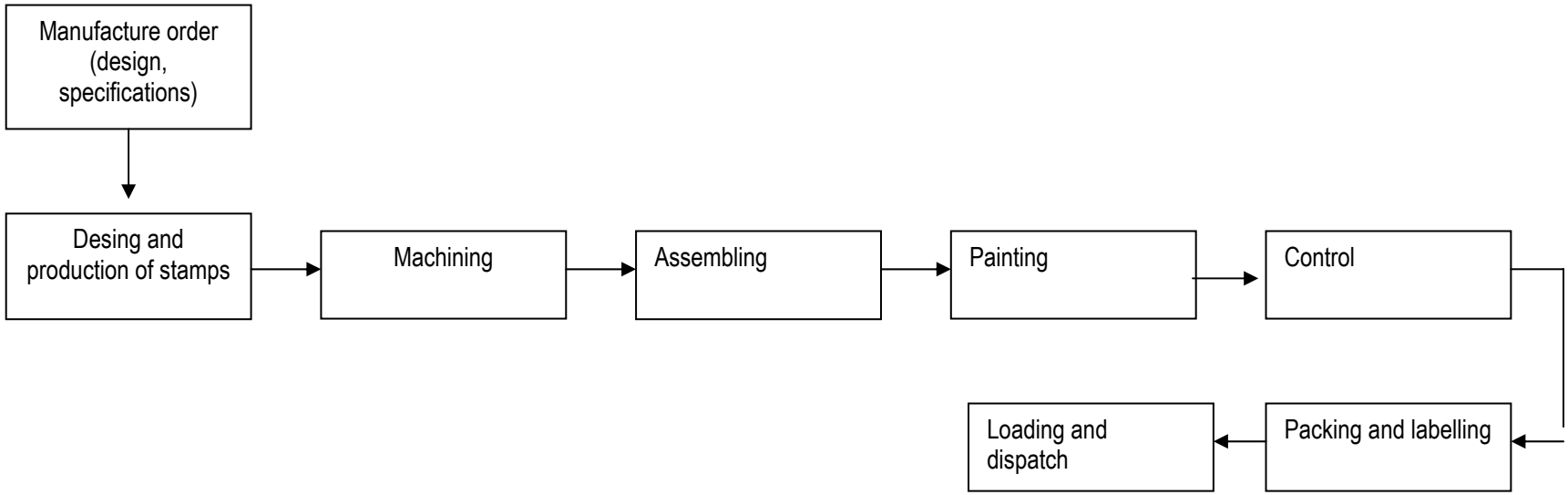
COUNTRY: SPAIN
COMPANY: PROIEK

TRANSFERABLE ACTIVITY: SHEET TRANSFORMATION



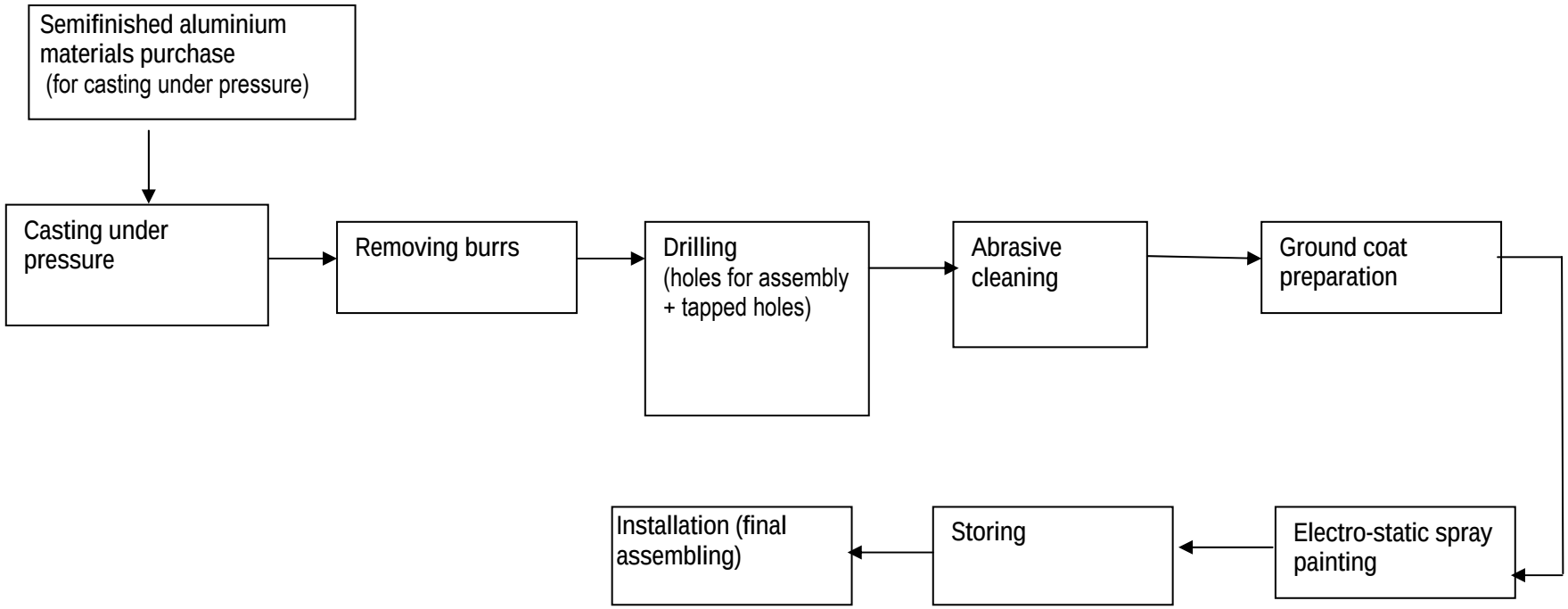
COUNTRY: LITHUANIA
COMPANY: METGA

TRANSFERABLE ACTIVITY: Designing and manufacturing of the new diversified products requiring specialization of activities and constant adaptation to the needs of different customers



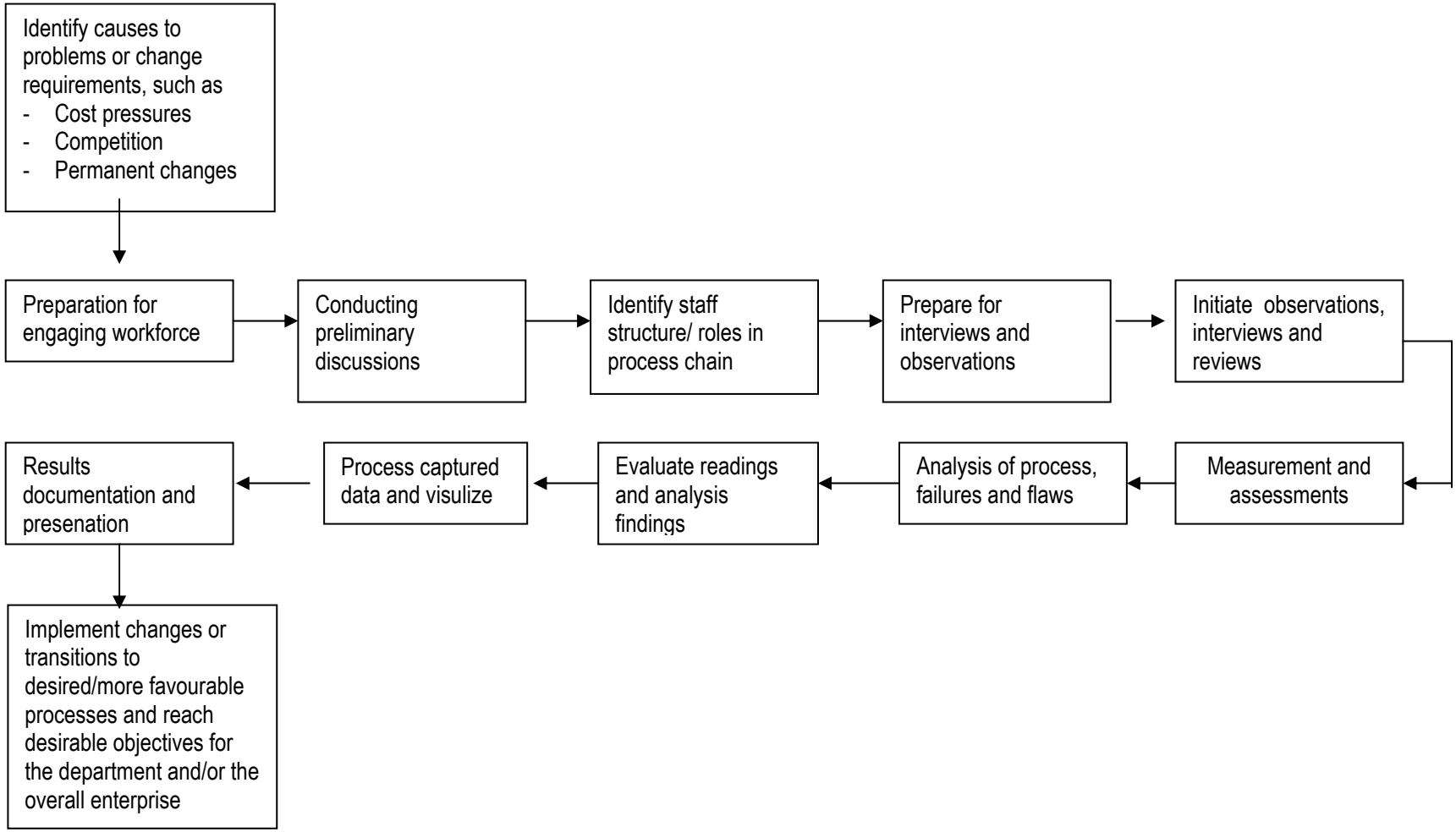
COUNTRY: ROMANIA
COMPANY: MECANICA FINA

TRANSFERABLE ACTIVITY: SHEET TRANSFORMATION (pressure Switch)



COUNTRY: SWEDEN
COMPANY: Säve Nya Mekaniska Verkstad AB, Bomek, and Allan Johansson & Co Mek Verkstad AB. SME reviewer: Tibor Hatala

TRANSFERABLE ACTIVITY: PROCESS ANALYSIS



5.- CONCLUSIONS

It is difficult to manage restructuring successfully, and the action taken is sometimes fairly ineffectual, especially if the need has not been anticipated and changes take place suddenly. Certain aspects inherent in the local/national/European economic fabric, especially institutional players, neighbouring enterprises and social partners, play a decisive role in properly anticipating and meeting the challenges thrown down by current changes. In the context of the industrial past, investment in innovation, education and training (need for synergy with the education and training environments) and the approach to immigration, the involvement of all players in better anticipation, initiation and management of change is essential. These horizontal policies reflect the inter-sectoral dimension of restructuring and the need to establish broad policy frameworks to anticipate changes of this type.

This report, contributes to remark that the reorganising productive activities is both necessary in order to guarantee the economic dynamism and competitiveness of the enterprise and irreversible because the establishment and development of the single European market and the international opening-up of economies represent, in the long term, growing opportunities. This diversity has increased in the European Union of 25 and is set to intensify further with the recent integration of the countries in the process of transition.

Moreover, changes in demand (consumer habits, European enterprises' investment strategies) need to be taken into account in the medium and long terms. Recent trends in economic growth and employment suggest the spread of new production methods and consumption patterns in the new Member States and emerging countries, bringing about a change in the world distribution of production and labour.

Cooperation between all the stakeholders (public authorities, professional organizations…) plays an essential role, especially to the SMEs, allowing the players concerned to better anticipate the developments to be expected with regard to the potentially affected territory and population groups.

Therefore, the European Metal Sector must concentrate on the activities of all sectors with a high added value, rich in innovation and human capital, and capable of adapting rapidly to structural changes and developing or exploiting relatively unskilled labour (hence the importance of investing in human capital and lifelong learning).