

**PROJECT NUMBER: 142570-LLP-1-2008-1-ES-LEONARDO-LMP**

## **AN INVITATION TO REFLECTION, DISCUSSION AND ACTION FOR IMPROVEMENT**

The Leonardo da Vinci SKRAT project aims at offering you a direct and trustworthy assistance in relation with the issue of know-how management in general, and with **know-how retention** and **transfer** in particular. This Guide is one of the main ways of offering you this assistance, being elaborated based on the input of national reports investigating SME needs in this area.

In line with this aim, we will help you first to understand better the **conditions** and the **opportunities** related to the preservation of know-how within your organisation, guided by the fundamental pedagogic principle stating that awareness is a fire to light, not a pot to fill. The first part of the GUIDE will therefore focus on presentation of the main HRD approaches used, related to knowledge, skills and competences identification but also to **age** and **knowledge** management. At the same time, this part will explain how these ideas articulated in a step-by-step strategy and why it is important for your organisation to start a process aiming at know-how retention and transfer.

The second part of the GUIDE will offer you guidance in the process of **implementing this strategy**, presenting you the rationale of each step, specific risks and opportunities. You will be introduced to alternative strategies that you could use to fulfill the objectives of each step and you will get familiar with a wide range of tools that you could use in this sense. The Annex of this guide, elaborated as a Tool Kit, will offer you more in-depth information about the content of these tools and also about the ways they could be used.

Also, the GUIDE provides you practical hints to apply these strategies more effectively and with fewer resources. These recommendations are formulated when discussing the content of the strategy steps but also in a separate, final part, focused on the main barriers for learning at company level. Here you will be introduced to other possible areas for intervention aimed at facing the challenges of promoting learning within organization for preserving its know-how asset.

#### THE KNOW-HOW RETENTION AND TRANSMISSION CHALLENGE

WHAT ARE THE MAIN AREAS COVERED BY THIS GUIDE?

OVERIVEW OF GUIDE STRUCTURE

The figure below is offering you a synthesis of the way the GUIDE is structured and the main areas covered by our methodology:

OVERIVEW OF GUIDE STRUCTURE

SKRAT trans-national project aims at offering a tested methodology, a guide and a good practices handbook and so assisting SMEs in metal sector, social partners and training consultants/ practitioners in developing innovation in company-based policies for knowledge retention and know-how transfer. SKRAT has a special focus on improving the environment for life long learning within companies and the management of demographic change.

The partnership, coordinated by Fundacion Metal (Spain) includes the following organisations:

-Germany: **IG Metall**

-United Kingdom: **Entente**

-Italy: **Training2000**

-Portugal: **CENFIM**

-Romania: **Institute of Education Sciences**

Internal evaluation - **ISOB** (Germany)

#### A European

#### co-operation project

Under the circumstances of a prolonged economic crisis, marked by several distortions and financial resources scarcity, many enterprises have been subject to various highly intensive challenges. The **metal sector is one of the most severely affected**, with the SMEs in the front-line of the negative economic developments, facing unprecedented reorganisation needs, including the human resources side.

If you are active in this sector, it is probably that your organisation is already facing challenges related to staff made redundant, high turnover processes, generational change (i.e. early retirement, voluntary leave). All these are threatening your main organisational advantage, **the know-how asset**, preventing you to remain competitive in a sustainable way, to improve your processes or services or to take advantage of new business opportunities.

In all cases, the employees leaving the company, irrespective of the reasons, are **taking out from the organisation knowledge and know-how** **essential for your success**. Moreover, this is a process preventing or negatively affecting your capacity to identify, create, store, transmit and use your workers individual and collective know-how.

A STRATEGIC APPROACH TO KNOW-HOW RETENTION AND TRANSFER

WHY?

The need for a strategy to retain and transfer the know-how within the company

WHAT?

The strategy developed by SKRAT

HOW?

Methodology and tools proposed by this Guide

SKRAT

# **Re-assessing the challenges to your organization: the competence asset**

A STRATEGIC APPROACH TO KNOW-HOW RETENTION AND TRANSFER

* The lack of appropriate know-how of personnel is ranked among the “top 3” most important barriers to introducing new technologies in the view of employers in metal sector in several European states economies?
* More and more SMEs in metal sector in Europe are interested in finding new ways to invest in multi-skilling their work-force?
* Most of the companies prefer to develop strategies for know-how retention not interfering with the work processes?
* Due to important changes (i.e. in the demography) it will become more and more difficult for companies to cover their qualification needs externally on the labour market so increasing importance lies with in-house know- how transfer strategies?

\**SKRAT Trans-National Synthesis Report (available at www.know-how-retention.eu)*

To respond to this challenge, you should start by accurately analysing your know-how capital and know-how gap, being aware that your employees (and hence your organization) have two main types of knowledge:

**Explicit** - knowledge that can be articulated in formal language, can be recorded (i.e. stored in books, documents, databases, webs, e-mails etc) and formally/informally transmitted through professional development activities;

**Tacit** - knowledge that is not articulated in formal language, being a personal, inner knowledge embedded in individuals/groups but as important to be transmitted through professional development activities. Mainly based on experience, this knowledge is often-linked with beliefs, perspectives, and values.

The skills and the professional abilities are examples/forms of tacit knowledge relevant in a working context. Looking at purpose and use, we can see both theoretical/technical knowledge of the employees and the skills and abilities as forms of:

**Know-what** - a fundamental stage of knowledge, reflecting individuals/organisations ability to collect and record relevant data, facts and information; it is acquired in most of the cases through formal education and training processes but also through informal and non-formal learning inside and outside the working place. The know-what is not directly assuring the holder *when* and *how* to apply the knowledge to solve problem.

## **The loss of key areas of competence is not an inevitable process. You need, however, to think of a new strategy and actively promote it!**



WHY A STRATEGY FOR KNOW-HOW RETENTION AND TRANSFER?

#### Do you know that\*…

Companies and employees **accumulate** and **capture knowledge** unconsciously **in diverse ways**, through several methods, practices and situations, i.e. experiential learning or learning by doing, informal meetings, observing or listening to others, debriefings etc. Some of this learning could be systematically managed by you while other forms not, as they occur during daily work and practice.

To find out what are your strong and weak point in relation with know-how asset of your organization you should pay attention to:

- activities offering you the possibility to identify the key knowledge, skills and competences for your company;

- informed ways to assess the gap between existing and needed key competences;

As a company, you need to initiate and implement specific measures for assessing the know-how asset and you have to build a strong partnership in this respect since **you** **share this responsibility with your employees and the government**.

**Know-how** - people/group/organizations ability to translate formal, or learned knowledge into real-world results, e.g. knowing when to use certain knowledge to solve work related problems or to take advantage of opportunities relevant for specific work processes.

Think of a person who just got the driving license. All he or she is doing when driving is conscious: changing the gear, signaling, moving the steering wheel in a right position etc. Through experience, most of these activities are becoming automatic, done without being consciously acknowledged. The skills of the driver are becoming incorporated in his/hers know-how.

Moreover, new skills are developed during this process (i.e. related to adopting a preventing driving style), an implicit knowledge that the holders are less conscious of. The knowledge creation at your organization level always occurs in time, when employees, as individuals or as a group, come up with new ideas, approaches, and product or process innovations by observation, experimentation, project work etc.

You should be concerned therefore with the process of **capturing the experience and expertise of the individual** in your organization and making it explicit, and so available to all colleagues who need it now, or in the near future.

**More advanced abilities are related to know-why, knowledge that is linked with the ability of individuals or groups to deal with new, unknown interactions and uncertainty. For this, a specific strategy, beyond SKRAT objectives, should be considered.**

#### Understanding the know-how challenge

An activity of your organization, in itself, is not the *competence*. If the activity is performed successfully time after time - then we can say that the activity has provided **evidence** of competence. But those competences might possibly have been demonstrated in another activity, being usually transferable from one activity to another.

Bu what is a competence and why is important for your company to take it in account? A competence is **a complete package of skills, knowledge and attitudes required to perform a task**. As we have already seen, it supposes the knowledge of how to do a job, and the skills to do it, but also the understanding of why it is being done, and the impact of the job on colleagues, customers, the organisation and the wider community.

The competence, in this context, is not a new idea: the skills of (medical) doctors or pilots have always been subject to strict requirements for practice and experience, before they are considered as “competent”.

What you should see in a new perspective is the concept of applying the same criteria to other sectors where a certificate of attendance at a university or training centre has been all that was required – up until now.

**You should be aware that, according to various studies,** about 80% of our competence is gained through non-formal and informal learning – in other words it is not gained from a study program of a school, university or training provider. This fact is important for the way you organize the working processes so to make your organization effective in developing competences of your workers and in transferring important competences from senior, experienced staff to younger colleagues.

This fact is equally important for the way you are assessing the existing and the needed competences, critical for the success of your company.

Competence can only be properly evaluated by demonstration; the fact that someone has a degree, a certificate or a diploma does not prove that a specific competence is fully acquired, lacking the needed practice and experience.

Where systems exist to validate competence, the evaluation is conducted by comparison of the competence demonstrated with **defined and agreed occupational standards for the jobs in that particular sector**. These national standards must be agreed by industry and commerce in order for the evaluations to be consistently applied, and the resulting validation certificates to be credible throughout the sector, and possibly throughout the country.

Where no national systems exist, organisations can establish levels of competence to be used internally, but any validation that they issue is unlikely to have any National or International credibility unless the organisation itself has a lot of status.

#### But why competences are so important for my organization?

This is one of the reasons why implicit knowledge is of the same importance as explicit knowledge and should be taken into account when considering promoting competences retention through lifelong learning activities.

When an experienced worker is leaving the organization you have to be assured that **as much as possible, his/her know-how will not disappear from the organisation**. The risk of losing specific competences should therefore be carefully assessed and so you have to pay a special attention to:

- stability/fluctuation of key competences for the organization success, asking yourself what are the risks if the holders of know-how leave the organization in the future;

- things that help the process of competence retention and transfer within the organization.

- constant monitoring and revision of strategies/interventions carried out and their impact on the know-how asset of the company

#### The challenge of making your organization more conducive for learning

**Prevention of know-how loss at organisation level**

Even the SMEs that are determined to tackle the skills loss problem face important difficulties **to create and use** **HRD capabilities** for:

* finding out the most relevant knowledge, skills and competences assuring the success of the company;
* using qualification frameworks and competence standards in defining know-how.
* understanding and take appropriate action for closing the skills gap (existing know-how vs. needed);
* defining the range of skills necessary for a specific development (i.e. a new product, service etc.)

The pro-active approach in relation with know-how retention should be concerned with finding new, innovative ways of identifying key knowledge, skills and competences but also in making your organization more **c**onducive for learning and know-how transfer.

Of course, most of the learning activities of the company turn around the explicit knowledge being transferred to your employees. But your employees, especially the most experienced ones convert explicit into tacit knowledge and use it in all key aspects of their work.

#### THE POSITIVE SIDES OF KNOW-HOW RETENTION…

There is a strong link between **the way the competences asset of the company is valued and the attitudes of the employer on know-how retention and transfer**. The companies understanding of the value arising from an adequate preservation of the HR knowledge and skills are demonstrating to have the most open attitude towards the activities involving identification and preservation of key competences within the organisation.

A strategic approach in this area **will have a positive impact** on your company, assuring:

* Predictability of company development
* Support for the technological changes
* Foundation for future know-how audits
* Flexible, easy adaptation to new production processes.

As you see, there are many **important conditions** for a successful preservation of key skills and knowledge for the company’ competitiveness. Of course, the most important factor is your answer to the question: to what extent the know-how loss is negatively affecting my company for the time being? If you are sure that staff turnover and retirement of your aged workers is not a threat or a risk on short or long run, for example if you consider that you can replace the know-how lost by recruiting new personnel, our GUIDE could be of limited use for you.

On the contrary, if one of your answers to the following questions is “YES”, you could be interested in this GUIDE, that is offering you assistance in all the stages of initiating, implementing and evaluating an integrated strategy in this area:

* The organisation has not yet developed a know-how map making explicit the existing knowledge, skills and competences of the employees
* There is no forecast related to know-how shortage/skills gaps
* There are no explicit procedures to develop know-how for specific positions right from their holders.
* Employees have so far limited experiences of intergenerational professional exchanges

Often companies discover that key know-how is lost **only after an employee leaves the company**. Acting before a negative process occurs is a key to minimizing resources loss and sooner the problem of know-how loss is identified, higher are the chances to develop and implement a relevant strategy to tackle it. Following a pro-active approach provides you not only the guarantee that resources will continue to be at your disposal but also that you could maintain, in the long run, the competitive advantage of your company.

HOW COULD YOUR COMPANY ASSURE THE KNOW-HOW RETENTION ?

THE COMPANY POSITIVE ATTITUDE IS A DECISIVE CONDITION

**SKRAT TURNS AROUND THE AXIS *ANALYSYS OF WORK PROCESSES*, *ASSESMENT OF KNOW-HOW GAP AND DEVELOPING IMPROVEMENT MEASURES***

From the **employee** **perspec-tive** this equates with an individualised HR policy that guarantees employability, increases the job security in constantly changing employ-ment conditions. For senior workers, it is a way to facilitate a gradual transition from working life to retirement.

Moreover, SKRAT understands

inter-generational professional exchange and the sharing of knowledge as having a direct impact on employees capacity to adapt to new positions.

From the **employer perspective** this equates with an efficient use of existing (human) resources, making explicit the implicit knowledge leading to know-how retention, transfer and development. It is a way of recognizing that people are the most important assets of a company.

The process of knowledge preservation is complementing and also sustaining the knowledge-creation process, in a **continuous concern for lifelong learning promotion at the organization level**. Therefore you should take both into consideration when designing strategies for professional development of your employees.

**Organisational knowledge balance: creating and preserving competences.**

Of course, the resources and the way small and medium size enterprises operate are restraining the choices available. From this perspective, experienced/senior workers become a direct resource for SKRAT integrating strategy, offering an in-house capability in all know-how transfer activities.

Our approach is therefore making explicit a strategic practice that focuses and values the **experienced workers input for enhancing the learning processes within an organisation**.

WHAT STRATEGY IS DEVELOPED BY SKRAT?

SKRAT assumption is that the development of work processes and know-how retention, transfer and development processes must be **controlled** and **correlated**. **Know-how transfer** is therefore one of the most effective ways for your organization to assure the retention of key competences through the acquisition of knowledge by less experienced workers so that it becomes internalized into your firm's knowledge base.

As a consequence, the approach proposed by SKRAT methodology has three main pillars:

- the first emphasises the role of **work processes and competences** **analysis** as a foundation of know-how transfer.

- the second is related to **learning management,** defining and actively promoting the know-how transfer activities.

- the third is related to the **age management** activities and the key role of the 50+ employees for the know-how retention.

**Simply put, your company could increase its competitiveness if you take into consideration the key know-how for your company, the risk of loosing the existing know-how and the opportunity of know-how transfer. Moreover, your company should value more your senior workers potential, the link between your key work processes and their related know-how and their potential in constantly improving your environment for lifelong learning.**

Setting the category of **senior workers** as a priority for the know-how transfer at company level **is a concrete and effective way of dealing with age management policies within your organisation**. SKRAT approach is going therefore beyond valorising the senior workers experience and expertise at their workplace , emphasizing the need to offer to this category of employees new roles **in transmitting their know-how to other workers, especially the younger ones**.

In other words, to enhance the learning opportunities within the company, and, at the same time, develop the motivation and sense of satisfaction of all employees.

Convergent learning management interventions could be the driving force of flexible schemes leading to sustainable ways of preserving the key competences of your organisation.

WHAT STRATEGY IS DEVELOPED BY SKRAT?

## **INVESTING IN IMPROVING THE ENVIRONMENT FOR LIFELONG LEARNING**

## **Experiences at company level, fundament for SKRAT strategy**

Looking at the experience of companies from the countries represented in the partnership we have identified a wide variety of initiatives relevant for know-how retention through know-how transfer-type of measures.

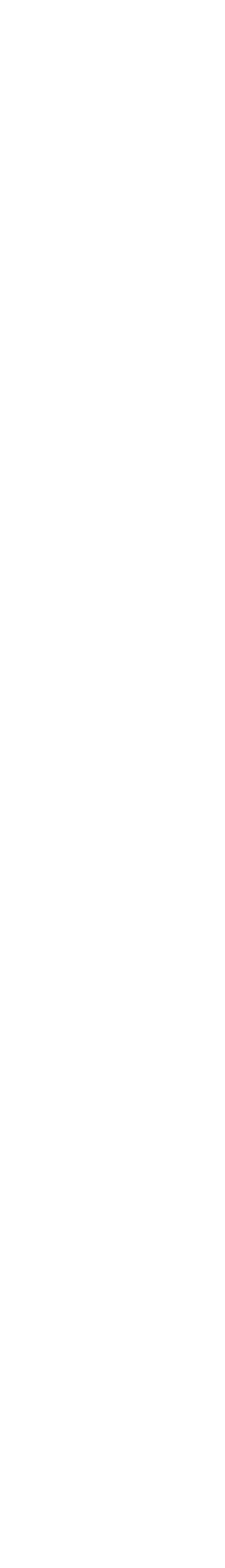
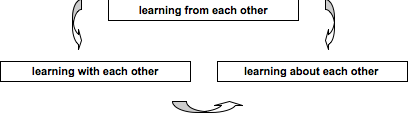
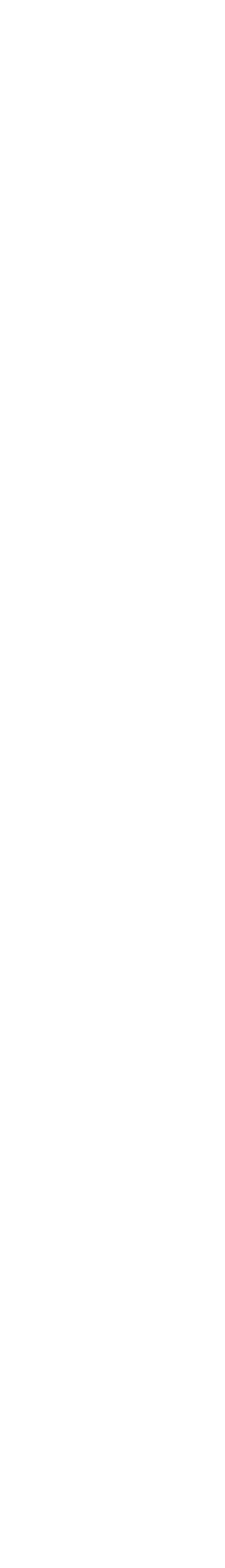
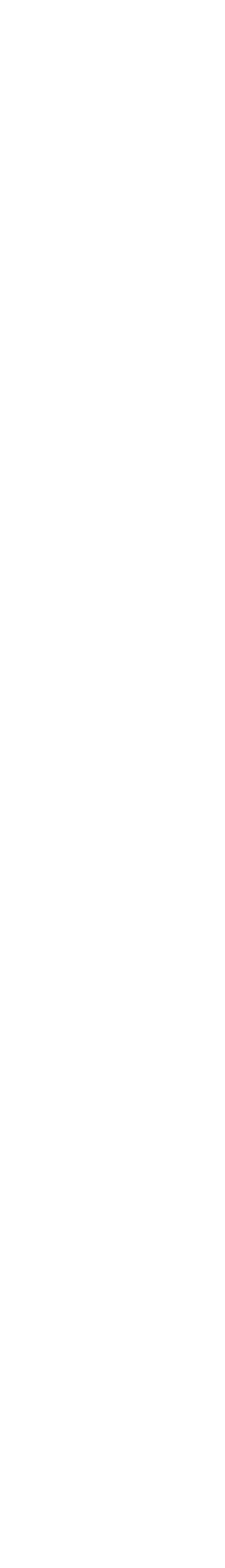
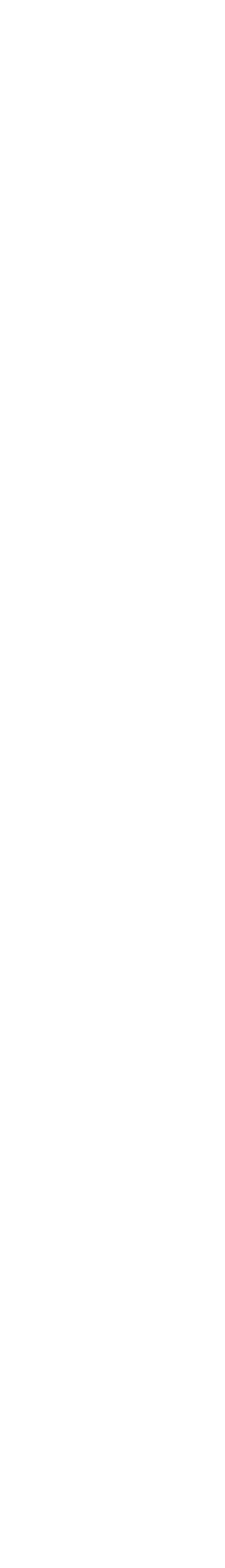
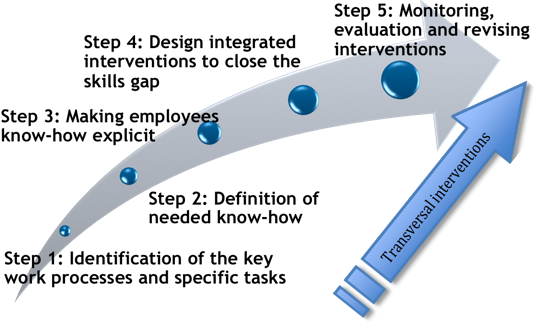
These initiatives offered the basis of SKRAT strategy, orientating its main methodological choices and the description of the proposed processes/steps defining this methodology. **In particular, all these experiences are offering the guarantee that the strategy is feasible, ready to be implemented and closely linked with the resources available.**

It is highly probable that your company already uses some of these approaches. SKRAT strategy focus is to assist you in enlarging your array of choices but also their effective integration in an overall strategy promoting know-how retention and transfer.

We emphasize the strong orientation towards its integration in the overall development plan of the organisation, as part of a general strategic approach supported by both management and trade unions. All relevant parties within the organisation should be involved from the planning stage to the implementation and evaluation. Of particular importance is the **early commitment and participation of employees, staff representatives and trade unions**, as SKRAT strategy is encouraging a close cooperation between management/top executives and staff representatives.

When necessary, **external counselors** or experts should be contracted. Some of these approaches require also specialized training of relevant actors (managers, supervisors, HR practitioners etc). The step-by-step strategy will indicate when such know-how is necessary and also how it can be developed, in relation with national context.

SKRAT also is developed looking at the experience of companies going beyond traditional methods of improving and developing commitment to assure the employee performance, **promoting innovative solutions to create an effective bond between the individual and the organisation.**



Manager’s opinions are confirming the importance of know-how audit and of the fact that leveraging it further will offer a critical and sustainable competitive advantage of companies?

For many employers the most relevant area of know-how transfer are activities related to intergenerational learning?

More and more companies implement alternative working arrangements

and offer some degree of choice and scope for experienced staff, in close cooperation with staff representatives?

Assigning new relevant responsibilities to senior workers in relation with know-how transfer proves to be an effective practice to prevent leaving?

\**SKRAT Trans-National Synthesis Report (available at www.know-how-retention.eu)*

#### Do you know that\*…

As already demonstrated, awareness of know-how challenge entailed by turnover processes and ageing is of utmost importance for your company future development. This is also the starting point of SKRAT commitment for inward investment in organisation: while employers expect to have flexible, creative and productive staff, employees expect a set of policies and procedures assuring their employability and their capacity to face the changing nature of their work. Could these two perspectives be re-conciliated?

SKRAT offers a positive answer to this question and promotes a managerial perspective arguing the need to establish an integrated series of personnel policies, programs and practices to support the organisational strategies. It emphasizes that leveraging employees know-how is critical to achieving and preserving a competitive advantage and focus on provisioned demand and supplied competences within the organisation.

For tackling the issues of know-how drain, limited know-how transmission within organisation and ageing personnel, **SKRAT proposes you to engage in a strategic approach and analyse**: the current state of your workforce (has the necessary know-how to do what it should be doing in order to achieve your goals?); the internal strengths and weaknesses (what is the know-how missing/needed to assure the organisation competitive advantage? what are the main threats related to know-how deficit?); the internal opportunities (what resources can be mobilised to answer these challenges?) and last but not least the possible paths of action (What interventions have the highest chances of success to solve the threats identified? What can be done with the existing level of resources available?).

In this understanding employees are assets, not (just) costs, because:

* managing human resources implies both a strategy where employees are used to achieve organisational goals but also a concern for assuring the conditions for their success
* employees should be constantly assisted in their professional and personal development and should benefit of incentives to assure commitment and participation;
* employers should be concerned to invest appropriate time and resources to maintain a skilful and committed workforce to gain competitive advantage.

## **SKRAT methodology is not replacing, but an integral part of your existing HRD strategy. It guides you in adopting a strategic approach and promotes interventions in which senior members of your organisation play an important role.**



HOW SHOULD WE PROCEED? METHODOLOGY AND TOOLS PROPOSED BY SKRAT

In a simple and straightforward message, SKRAT is an invitation for employers, employees and social partners to reflect on their existing initiatives and practices aimed at preserving the most valuable asset of an organisation: its know-how. Therefore the Guide offers both an instance to validate these experiences but also it offers suggestions for new activities, embedded in a coherent overall strategy.

By following the proposed methodology, you will be in a better position to find answers to key questions for future development, such as:

🡪 can my organisation goals be achieved with existing qualifications and skills of the

personnel?

🡪 which are the weaknesses (skills, organisation, communication shortcomings, etc.) and strengths of my organisation?

🡪 by which means I can assure additional or lacking know-how (to what extent HR might be ensured from within the company by interventions such as: recruitment, promotion, vocational training, re-conversion, job redesign, job rotation etc)?

🡪 to what extent the local labour market supplies newly emerged skills/qualifications and, obviously, whether it is or not necessary to resort to employment from outside the company?;

🡪 to what extent the know how of the senior staff could continue to be used as an asset of the company?

## **SKRAT areas of intervention as part of an integrated HRD Strategy**

To accurately assess if your employees have the necessary know-how to do what they should be doing in order to achieve your goals SKRAT proposes a multi-staged approach, as follows:

1. In the first step you should be concerned with the identification of the key work processes within a company and specific responsibilities attached to each process.
2. Than you should be concerned to accurately define the needed competences specific to key work processes indentified in the first step. In other words, to identify the know-how needed for the successful completion of these processes.
3. In parallel, you should assess to what degree the workers have the needed know-how and what are the risks entailed if these workers leave the company. Your organisation could therefore become aware on the internal strengths and weaknesses and the know-how missing/needed to assure the organisation competitive advantage.
4. Based on your analysis, SKRAT methodology proposes a fourth step, related to design interventions to close the know-how gap and retain key competences of your workers within organisation. The process of know-how retention/transmission is made possible by increasing the opportunities for learning, aged workers playing a key role both as facilitators and mediators of learning process (formal, informal and non-formal).
5. The last step of SKRAT methodology promotes further actions to fine-tune your interventions, based on monitoring and evaluation activities, overcoming possible learning barriers that your employee might face.

In reality, is likely that **you will use a different sequence in implementing these steps**, due to various environmental causes (resources and time available, customer requirements, market specificities etc.). However, the logical sequence of these steps is the one presented by this GUIDE.

To sum up, **the roots of SMEs challenge related to know-how retention SKRAT address** are:

SKRAT step-by-step approach addresses all these challenges and also promotes relevant existing strategies and best practices to **create appropriate learning environments and opportunities** for know-how transfer. Our assumption is that awareness of these positive experiences more easily creates needed capabilities related to finding the most effective way to adapt them to internal conditions.

SKRAT helps you to have a clearer view **on the importance of know-how transfer** from the employees with experience and expertise to their colleagues, guiding you to answer practical issues such as:

* Who should be involved in the know-how transfer processes?
* What resources should be made available?
* How should be monitored/assessed the know-how transfer process?
* What is the expected impact of know-how transfer interventions within your organisation?
* How do you know you are on the right track and what should be improved?

The special emphasis on experienced workers of SKRAT is reflected not only in the description of each step of the integrated strategy but also in a range of transversal measures and tools suggested to complement/increase the effectiveness and impact of your interventions. These measures address the possible choices to overcome the learning barriers in general, and those related to aged workers, in particular.

It is very important to have SKRAT intervention on a strategic level since effective organisational interventions can only be set if resources (human, physical, technological etc) are identified and made available. The inward investment should be closely linked with the **competitive advantage argument**: it is worth making such investment only if it assures/preserves a know-how base that is better than the competitors, allowing a faster adaptation to the changes occurring in the market environment.

**As illustrated above, depending on a multitude of actual circumstances – among which, your company’s profile, position on the market or development goals hold a very important place – your strategy can be followed in full length or limited to relevant steps. Of course, you should take into account the availability and competences of specialised staff in HRD area and also your capacity to co-operate with relevant external partners.**

**The same goes for the tools presented in the second par of the Guide, as having an illustrative purpose, offering you possible references backing your strategic approach. You will get acquainted with the practices at use in different companies in partner countries but you are strongly encouraged also to look for other tools that fit for you and you are comfortable with.**

The pilot action in companies offers the possibility to the project team to see how the proposed steps of SKRAT methodology can be followed. Based on these experiences, a set of case studies will be designed, adding another resource and increasing the chances for companies to independently use SKRAT products.

## **So far you became familiar with SKRAT aim, approach and methodology. The second part of the Guide will present each of the steps and will indicate various tools that you can use within this process. A detailed view on each tool, including contexts and recommendations for use is available in the TOOLKIT, annexed to the Guide.**



HOW SHOULD YOU USE THIS GUIDE ?

***Only if you have a description of know-how you can retain it!***

***Only if you have a description of know-how you can transmit it!***

***Only if you have a description of know-how you can improve it!***

* **Do you use to define and formally describe your work processes?**
* **If yes, are you doing this on a regular basis or only on specific circumstances (i.e. restructuring, new products/services etc.)?**
* **Have you prioritized the most important (core/critical) work processes, in relation with the importance for the added value for the company activity?**
* **Do you consider that the description of the key work processes is actual so it still meets the requirements of your organization and of your customers? (i.e. related to quality, complaints, costs, technology etc.)?**

By taking into account your current business environment, your short and medium term development plans and your targeted performance, you could analyse all your **productive processes** and define a **range of key work processes,** critical for your success on the market.

This step is of particular importance for the know-how gap analysis and also for the assessment of current level of workers competence, in relation with their key tasks and responsibilities assigned.

In other words, by engaging in this process, your organisation could get a solid justification **why to consider a range of specific know-how and knowledge** important and **why it is worthing for you to invest in their retention, development or transfer**.

## **Key work processes are the starting point of the know-how retention strategy.**

Tool 1.1.

Grid for identification of key work processes

Tool 1.2.

Documentation of major tasks specific to work processes

**STEP 1. Identification of the work processes and specific tasks critical for the company present and future development**

It is possible that you already have defined formally your productive processes and you are aware of the areas of activity and the work processes that are critical for your business.

If you don’t have yet, a simple way of representing a hierarchy of work processes linked with a specific domain or area of activity could follow the structure presented in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| Development Targets | Domains/Areas of Activity | Work Processes | Key responsibilities |
| DT1 | DA 1  DA 2  DA 3  … | WP 1  WP 2  … | KR 1.1.  KR 1.2.  …  KR 2.1.  KR 2.2.  … |
| DT2 | … | … | … |
| DTn | … | … | … |

You could **develop this process grid by involving key (expert) workers in the definition/ description of your key work processes, those having the higher capacity to explicit know-how.**

|  |  |
| --- | --- |
|  | **STRATEGY OPTIONS** |

* Without a description of the work processes it is much harder to discuss improvements while a definition of these could offer you an important reference for the changes
* Without a description of the work processes you will know only by chance what skills are needed to master the process (over/qualification) while the definition of these processes allow for a targeted policy of staff development
* An accurate description of work processes creates the basis for discussion (improvement), transfer (teaching) and operational excellence (implementation).

|  |  |
| --- | --- |
|  | **POSSIBLE PROBLEMS/OPPORTUNITIES** |

**STEP 1. Identification of the work processes that are critical for the company present and future development**

This tool offers you the opportunity to actively involve your employees in relevant activities for know-how retention such as:

* Select the working contents relevant to be documented;
* Contribute to the selection of content;
* Assist the in-house vocational training (if existing), with responsibilities in design of the layout;
* Validate the of database or qualification matrix once elaborated and participate to its regular revision and update;
* Monitoring the internal groups providing information and guidance;
* Asses the employee use (i.e. self-driven learning), etc.

The **learning place analysis** is developed *in situ* within a special unit of the company. Responsible for the contents are the participating managers and vocational training representatives of the learning place. SKRAT emphasis also **the value of aged workers** **input** in using both suggested tools.

In order to understand better how structure and how work processes could be formally defined and inter-relate in an area of activity, SKRAT methodology suggest you to use the Tool 1.1. developed within the framework of Reinforce Metal Competences Project **(www.fvem.es).**

For obtaining a more comprehensive picture of the existing work processes but also for defining key work responsibilities, our methodology is indicating **Tool 1.2**, developed within the framework of ALF Project ([**www.alf-projekt.de**](http://www.alf-projekt.de)**).**

This tool manages to create a database/qualification matrix as an open source for both company and workers, starting from a standardised working process in a company. The advantages of using this tool are multiple. For example, it can help you to define a close relationship between different stages of production processes and specific responsibilities. At the same time, the employees can see their reached levels of competence for activities within their direct responsibility. As we will see, the matrix is also a useful planning tool for further development/transfer, to be used also by the line managers or supervisors.

Therefore, **this tool is highly relevant also for next steps of SKRAT strategy, especially for the ones related to the definition of existing/needed know-how and the lifelong learning interventions.**

**STEP 1. Identification of the work processes that are critical for the company present and future development**

* Start with describing one work process that you best know and adapt your method to your needs/data already available.
* If necessary, take into account the specific products/services and analyse the work processes involved to produce/provide them.
* After you mastered the method for one process go on process by process until you have a satisfactory overview of all relevant processes.
* Got stuck? Look for help from you most experienced workers of get help from an external facilitator. Often it is helpful to have an external perspective and someone to take care of the process and paperwork.
* Think of developing you capability in this are by having one of your staff trained as a facilitator or process consultant.
* Consider the resources experienced workers could bring in strategies/activities you select and create joint capabilities (i.e. council of the elders) to receive feed-back from them.

Your company could also organize regular reflection workshops, quality circles, strategy workshops, council of the elders, customer feedback creating the formal contexts to discuss if existing work processes are helping the organization to keep its level of competitiveness; if there is there a change in the hierarchy of work processes; if new responsibilities should be assigned if work processes are changed etc.

Another important activity specific to this step is the revision of relevant internal documents (i.e. work instructions, job descriptions, quality related documentation such as ISO etc.), important sources of information in prioritizing some work processes in comparison with others.

**PRACTICAL HINTS**

**STEP 1. Identification of the work processes that are critical for the company present and future development**

As already seen, an important part of the knowledge in organisations is tacit, embedded in job performance, outcomes or social relations in the workplace. After first step of your strategy you understand what are the most important key work processes, defining also the most important tasks and responsibilities attached.

The objective of this stage is to collect and record comprehensive and accurate data on the knowledge, skills and competences required by the employees having these responsibilities. Your analysis should be carried out in a realistic and structured manner that, if repeated, should lead to similar findings and results.

Guided by the prioritized list of work processes, but also from your occupations within the organisation, you can study the necessary conditions for accordingly accomplishing obligations and assuming responsibility and the conditions for taking this place (i.e. intellectual, physical, working hours, wage).

Taking into consideration occupational contents, the description of knowledge, skills and competences required by your organisation will allow you to compare the know-how gap but also to promote strategies for know-how development (in case of scarcity) or transfer (in case of unstable character).

* Do you analyse your key work processes from the perspective of the technical knowledge needed to fulfil related key tasks/responsibilities?
* Do you also use in assessing the necessary knowledge the proven skills/know-how?
* Do you define your work processes taking into account the competences needed, understood as empowerment/capacity to mobilize resources in a work environment to achieve a result?
* Are your job profiles stating what is the needed know-how for your most important work processes priory identified?
* Do you know what know-how must be assessed in relation to specific job responsibilities/occupations and know how long it will take to teach the know-how that is missing or unsustainable?

This step will allow you also to learn about the importance of socialization and of transversal skills, being as important as the technical competences. At the same time you will learn about needed attitudes for specific competences (i.e. taking respon-sibility, pro-active, customer orientation etc.).

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**Identify needed know-how to execute key work processes**

Tool 2.1.

Grid for collecting the data from an occupational analysis

Tool 2.2.

Qualification level descriptors

Tool 2.3.

Check-list to record critical know-how specific to key process

Tool 2.4.

Grid to record change processes

**STEP 2. Defining the needed know-how related to key work processes**

* If you define your key work processes in terms of knowledge, skills and competences you could take informed decisions about know-how development, retaining and transfer.
* If you take care only the formal knowledge/formal qualification of your employees you risk underestimating the value of know-how for some of the work processes of your company.
* If you relay only on the practical experiences you are in a weak position to offer your employees meaningful, customized professional development paths.
* If you successfully identified the skills/know-how specific to a work process you will have a solid base for all employees assessment related to this process.
* More detailed the map of know-how needed is, more you could control the competitiveness and innovative capacity of your organisation.

You have the freedom of using your own grid to record key information on needed know-how linked with key work processes and specific job responsibilities. However, by defining it as knowledge, skills and competences you could easily link your activity with the competence and qualifications developments at your national level. Even if often your employees are combining at work know-how specific to different occupations, it is important for you to know that the national qualification framework describes in a **standardized** way the necessary knowledge, skills and competences for a large number of occupations. Moreover, by embarking in this process, you could also take advantage of the developments in this area at European level.

For instance, you could find in ECVET methodology solid references related to the required time for acquiring a specific competence or the learning outcomes of training programs aimed at developing specific competences. More information about this system designed to operate at European level, interfacing with national systems and arrangements for credit accumulation and transfer could be accessed at [**www.ecvet.net**](http://www.ecvet.net)**.**

You have two important options, one focussing more on major functions of an occupation while other is more focused on required know-how or gathering input for development of training programs to develop the know-how. The purpose of the analysis determines largely which approach is to be used. Apart from defining know-how linked with work processes it is useful for other relevant activities within SKRAT strategy:

* auditing the skills required in an occupation used by the company
* developing job descriptions (old and new)
* reviewing the relevance of training programmes
* evaluating the performance of staff
* planning and problem solving in the workplace.

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|  | **POSSIBLE PROBLEMS/OPPORTUNITIES** |

**STEP 2. Defining the needed know-how related to key work processes**

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|  | **STRATEGY OPTIONS** |

##### To guide this process SKRAT strategy suggests you to use the tool of an occupational analysis grid - Tool 2.1, developed within the multi-annual Phare Project *Establishment of the National Qualifications Authority* *in Romania* (see for details **www.cnfpa.ro**). Similar tools could be found in all partner countries: Spain (National Institute of Qualifications http://www.educacion.es/educa/incual/ice\_CualCatalogo.html), Italy (Institute for Development of Continuous Vocational Education and Training of Workers- www.isfol.it), Germany (Federal Institute for Vocational Education and Training - www.bibb.de), Portugal (National Agency for Qualifications -www.anq.gov.pt) and UK (Qualification and Curriculum Development Agency - www.qcda.gov.uk/).

The grid framework defines and describes: major functions, specific activities, qualitative benchmarks, required knowledge, skills and attitudes and levels of responsibility. The choice of methods of data collection is influenced by the availability of **time,** the **skill** of the persons engaged in the analysis, the availability of relevant **sources** and the **occupation** under analysis

A major function is a combination of a procedure, a task and a body of theoretical knowledge and should be written as a concise statement, containing one **active** verb. The number of major functions will be influenced by the variety of functions undertaken and by the complexity of the occupation. A clear identification of the key processes and the critical know-how depends on the accurate way of identifying the major functions and the specific activities in each function.

For identification of specific activities you can be guided by the following two questions: w*hat does a person* ***do*** *to fulfil a specific activity?* and *what is the* ***outcome*** *of the activity?*

When analysing collected data you should also be concerned of the **minimum quality level** required for the results of the specific activities (products and services). These results have to be identified and then they have to be specified, i.e. how well the person should be able to perform the activity.Your analysis has also to describe the various contexts in which the activities are performed: specific place where activities are performed (indoor, outdoor, normal workplace, etc.); specific establishment/company conditions; types of customers; tools, equipment and materials used etc.

YOU HAVE FULL CONTROL ON THE WAY COMPETENCES ARE RECORDED

HOW COULD YOU DEFINE THE NEEDED KNOW-HOW?

The occupational analysis is a process **full of choice, leading** to a **result obtained through consensus and cooperation. SKRAT recommends that** s**enior workers** should be involved in all processes of data collection and analysis and in particular in:

* defining the coherent set of ‘functions’ (i.e. the group of activities, procedures and tasks that integrate knowledge and skills, that are related to an occupation and are not specific to particular technologies or location);
* defining required knowledge, skills and attitudes related to the function and not specific to particular technologies or location (i.e. what should a worker know and be able to do for a welding activity);
* defining the qualitative benchmarks for specific activities (i.e. stating what should be understood by a quality welding activity)
* defining required knowledge, skills and attitudes to obtain this benchmark (i.e. what a worker should know, be able to do and what attitude must have in order to achieve a specific result).

#### It is not enough to define within work processes what is the necessary

know-how to perform the main functions and specific activities of an occupation. At the same time, you need to decide **what is the level of mastery in each case**. For example, in a case of a welding activity, we must define the types of welding tools a worker should be able to use, the welding, quality indicators that he or she must follow for the process/product and also the degree of autonomy in performing this work. Moreover, you should analyse what level of initiative is required and to what degree this activity is predictable or it involves some degree of uncertainty.

As a company you should check not only if your formal employment record states the employment level required for all your employees but also if you have a formal analysis of the required level of qualification for all your key work processes and subsequent working posts. For this aim SKRAT presents in the Tool-Kit all the levels of qualification - Tool 2.2, as defined at European level by the *Recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for Lifelong Learning (EU document 14478/06).*

Even if at European level were defined 8 different levels of qualification, many companies are still using different scales (mostly used is one with 5 levels). Irrespective of your choice, you should be aware that more accurate description of the level of qualification entailed by a specific working process is better both for the working requirements for specific jobs and the identification/definition of specific know-how.

YOU HAVE FULL CONTROL ON THE WAY COMPETENCES ARE RECORDED

THE COMPANY POSITIVE ATTITUDE IS A DECISIVE CONDITION

HOW COULD YOUR COMPANY ASSURE THE KNOW-HOW RETENTION ?

HOW COULD YOU DEFINE THE NEEDED KNOW-HOW?

As you can observe, the traditional skilled worker profile of manual craft skills is changing. The new profiles include new areas of know-how, ranging from coping with critical situations on a decentralised level, to the proactive search for problems of product or process quality in a more autonomous working environment.

This is why you have to take into account that the work process should include not only issues of theoretical understanding but also **transversal, personal or soft skills** (linked with the key competences), including social-communicative skills, problem-solving and supervising competences that are embedded in the organisational and social context of the company. **You can find in the Tool Kit complementing this Guide an example of definition of competences both professional and transversal for one function/ major responsibility.**

Once you have established what are the key processes that are important for your company present and future success and what are the related tasks, you can indicate what is the knowledge and skills critical for this aim. SKRAT suggests to use a check-list - Tool 2.3,, allowing you to develop a formal document capturing the data you have collected (i.e. map of knowledge).

If you consider that the information you have is not sufficient or is not offering an accurate account of the essential know-how/competences for the success of your organisation you can organise a series of formal meetings with your most experienced workers to revise/validate it. The last step of SKRAT methodology, also focuses on checking if we are on the right track and what fine-tuning is necessary, provides additional tools in this respect.

There are simpler approaches to definition of know-how/competences linked to your key work processes. They are valuable since you can rapidly get a first overview of skills required to execute a certain job. (see next step). Their limitations are, however, that they do not inspire a discussion or reflection of different dimensions of knowledge, skills and competences required to do a job at a certain level. Often, what you get is a simple, static grid that provides limited information about the improvement areas.

To foresee the evolution of knowledge, skills and competences, taking into account future changes in your organization/work processes SKRAT methodology indicates you to use Tool 2.4, developed within the framework of Competences for Knowledge Society project ([www.fvem.es](http://www.fvem.es)).

By using this tool - a **standard** **questionnaire -** your company could assess the impact of a technological change on existing know-how asset within the organisation.Therefore,when considering introducing a change, you will get an accurate idea on what knowledge you organisation needs and what know-how can be transferred from old to new work processes. S**tep 3 of SKRAT methodology will assist you in deciding if your organisation has or has not yet these competences and know-how.**

HOW COULD YOU DEFINE THE NEEDED KNOW-HOW?

THE COMPANY POSITIVE ATTITUDE IS A DECISIVE CONDITION

HOW COULD YOUR COMPANY ASSURE THE KNOW-HOW RETENTION ?

In particular, the tool is valuable since it foresees future skills gaps, by offering you accurate information on the know-how needed to initiate a change within the company (often, technology related).

* Start with analyzing one or two concrete tasks related to these processes and find out which methodology you are comfortable with.
* Go on to analyse additional tasks related to one work process.
* Focus first on simple core activities within these tasks.
* Move to more complex activities, relevant for the tasks and the key work processes you have identified.
* Look also to your main products/services, as they could indicate other tasks and specific activities you have not identified.

As in the case of the tools used in the first step, you should make available/accessible the results to all your employees and you should assign to your most experienced workers specific responsibilities in this area. The use of modern technologies could be a useful support to record/transmit these results (i.e. as platform/website material, CD-Rom etc.), if your employees have the chance to get familiar with them.

Irrespective the strategic options you embrace, you should aim at obtaining a more rigorous view, less culturally biased, not only on how work processes are related in the existing environment but also on their dynamic evolution.

We strongly recommend you to link your analysis with developments at national level focused on EQVET systems. Please get in contact with relevant actors in this process: employers’ organizations, trade unions, sectoral bodies, institutions with responsibilities in national qualification framework development etc.

**PRACTICAL HINTS**

**STEP 2. Defining the needed know-how related to key work processes**

## **Often your employees know more or less than what their job requires so you should accurately assess their know-how, as a way the knowledge to be developed, preserved and transmitted.**

Due to various reasons, SMEs have only a limited knowledge of the abilities and competences of their personnel. If this is also your case, you should think that some of your employees have a know-how that **extends beyond the immediate job requirements of their work places** (as defined by the occupation standard, job description etc).

Knowledge by experience (know-how) spans also to areas not directly linked to the job description and it is a resource that your organisation should understand and valorise. In frequent cases it is not certified by an official or appropriate qualification. So, when leaving the organisation, the worker is taking away specific knowledge and skills that could prove to be essential for the company success.

In the traditional approach, the evaluation of the employee was purely limited to the work performance so it was not possible to acknowledge and use this potential. The new approach to staff assessment, on the contrary, is focussing on what an employee knows and it is relevant for the organisation, not only on what he/she does within the organisation.

Therefore you should be aware that the evaluation of your employees:

- operates with a set of evaluation samples specific to the competencies package to be evaluated;

- it might be realised **only** by persons, departments, specialised companies;

- involves a close co-operation between evaluator and evaluated person;

- has permanent character as regards information collection, but is periodically performed, as a rule, annually and/or by the end of a training programme;

- ensures interaction to surrounding environment by relating own employees performances to those of other same profile companies

Getting an accurate account on what is the existing know-how asset of your organisation compared with the needed one is offering you the basis of improvement strategies.

**Assessment means turning existing know-how explicit and so creating your capabilities in designing specific opportunities for learning, as we will see in the next step in our approach.**

Tool 3.1.

Main stages of employee evaluation process

Tool 3.2.

Interview grid for evaluation of employee’ experience, knowledge and skills

Tool 3.3.

Individual know-how profile

**STEP 3. Turning explicit/formalizing the knowledge and skills of the persons involved in the key processes**

**POSSIBLE PROBLEMS AND**

**OPPORTUNITIES**

* Do you have a complete picture how your employees are succeeding in answering to their job requirements?
* Are you aware of all the knowledge skills and competences employees use to perform successfully?
* Do you regularly check what are your main knowledge, skills and competences gaps by comparing needed and existing ones?
* Do you know which employees can be valuable for the knowledge transmission?
* Do you have a clear understanding of fields of development for all your employees to make sure that everybody has the right know-how for a long and productive working life?
* Do you make sure that all of your employees are included in analyzing these strengths and fields of development, also those in later stages of working life and lower skilled ones?

If you don’t have a systematic view on all knowledge, skills and competences your workers have, you can’t take care of specific interventions to retain these assets within the organization when turnover processes appears.

Systematically comparing your needed know-how with the one demonstrated by your employees you could identify know-how pools/holders and plan for effective transfer strategies.

Involving experienced workers in the assessment of activities offers additional motivation to workers to be part of a process in which the documentation of the knowledge, skills and competences profile of each individual leads to enhanced LLL within the organisation

Done on a regular basis, the know-how assessment process will become more complex and relevant, since you learn to choose appropriate methods and combine their use to describe the know-how of your employees.

Making available the outcomes of this stage to your employees will offer them the chance of self-improvement.

**STEP 3. Turning explicit/formalizing the knowledge and skills of the persons involved in the key processes**

During the evaluation process the knowledge, skills and competencies of each employee are assessed **so to continually enhance them and to assure full flexibility and employability for the lifetime of the worker but also the competitiveness of the organisation.**

In the end, the assessment process indicate whether the current or future employee **can** or **cannot** answer to specific job requirements, i.e. has the know-how and competences necessary to perform work activities at a required quality level.

SKRAT strategy proposes for this purpose Tool 3.1, developed within the DYCOWFI project, and aiming at identifying the know-how of your employees, especially the one **developed through working experience and not certified by a specific qualificatio**n.

The stages and the logic of the intervention is presented below:

**Stage 1. Does the candidate meet the minimum conditions?**

The people who want to get their competences recognised should meet some minimum requirements, thus preventing identification and development of competences from becoming a waste of time and effort for the involved people.

**Stage 2. What specific competences can be recognized?**

The people who want to have access to the system of competence will be informed about:

I ) the competence areas in which they could be assessed and II) specific data on the evaluation methodology (stages composing the system, aims of each stage, procedures, criteria, actors involved and expected outcomes of the evaluation).

After the analysis and evaluation of the information gathered in the individual dossier, depending on the results achieved, the following situations could occur:

* The evidences collected **are not** enough to credit the competence. Go to **stage 4: feed-back.**
* The evidences collected **are** enough to credit the competence. Go to **stage 5: recognition.**
* I have doubts, I need more proofs to recognise the competence or not. Go to **tests for the evaluation**

In case that the evidences gathered in stage 2 have not been enough to make a decision you could use at least one of the following tools to reach a conclusion to the evaluation.

**“In situ” verification** it is the most logical evaluation strategy for SMEs, as it is putting you in the situation of regarding the facts as they appear and gather relevant evidence of what happens. Before observation you should establish the activity that will be observed, the length and frequency of the observation and also the ways the worker will feed-back your analysis.

Of course, you should not limit the assessment to observation and also not limit to the explicit-know how, as we have explained in the previous steps of SKRAT. Self-assessment, simulations or colleagues/supervisors feed-back are other valuable sources of information for you.

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|  | **STRATEGY OPTIONS** |

**STEP 3. Turning explicit/formalizing the knowledge and skills of the persons involved in the key processes**

**PRACTICAL HINTS**

* Inform the evaluated person and highlight the perspective on learning pathways development of the process
* Look not only at your worker results/outcomes but also at worker in itself, potential asking their knowledge, skills and competences reached level.
* Evaluate his competences not only in relation with the knowledge certified by its formal qualification, often stating theoretical/technical knowledge (two dimensional) but also in relation with his actual performance and know how (three dimensional)
* Avoid errors related to insufficient time and resources allocated to evaluation process
* Constantly revise the results
* Feed-back and evaluated person and active use the results for future interventions.

Another tool that you can use is the criteria or competence-based interview - Tool 3.2. This type of tool is one of the most commonly used for the evaluation of competences, as it is a flexible, two-way and interactive method, easy to use, with a minimal cost. The objective of the competence interview is to verify that the candidate person has the personal resources to mobilise for the competence. It can be used it as a support for the “in situ” verification so that it enlarge the information collected in this way. It is important, as much as possible, to try to collect information from as many sources as possible and compare (triangulate) the results to get an accurate account on the know-how existing in your company. By systematically asking about situations in which behaviour and results have been shown, it is becoming clear how an employee is meeting a specific standard of competence.

A related but simpler tool that you can use is Tool 3.3, offering a visual representation of an individual know-how profile. The map is divided into different sections, each representing a specific know-how area. The sections are furthermore divided into six circles drawn inside of each others including know-how levels ranging from 1 to 6 (1 meaning poor skills and 6 meaning excellent skills). Numbers increase from inner to outer circles.

Here you can see a result of an assessment of a worker know-how demonstrated for a range of general skills and how the needed development areas are visually represented.

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**STEP 3. Turning explicit/formalizing the knowledge and skills of the persons involved in the key processes**

After the three steps of SKRAT strategy you have a good idea about **what ought to be learned** in relation with **what work processes** and what work related responsibilities.

Looking at the workers performing these functions you can check if there is a fine match or a skill gap between the expected and the existing know-how. If there is a match, your main concern should be **to retain the** know-how within your organisation and prevent the people with this know-how to leave the company. For this you could offer the experienced workers a stimulating learning environment in which they could further enhance/develop their knowledge and skills.

If the comparison of needed with existing know-how indicates a gap, you should consider **developing** this know-how by various learning activities, formal and informal. Following SKRAT approach, one of the most effective and simple methods you could use is to **transfer the needed know-how from the workers that have it.** With an accurate analysis in the previous steps, you can decide who should benefit from this transfer and who is the source of knowledge, skills and competences.

This is why your company should **create opportunities for inter-generational learning**, facilitating the transfer of know-how (formally or informally) to younger colleagues, including also the new recruited staff. Having this initiative you guarantee that **key knowledge and skills are remaining within the organisation** and is not lost in turnover processes. In other words, you have to find out the pathways for learning that are appropriate for your employee’s specific situation and developing aims.

- Do you know if what your employees are learning is relevant for their work and for your organisation?

- Do you influence the learning processes for know-how transfer?

- How important are aged workers in designing know-how transfer activities?

- How conducive to learning is your organisation, in relation with work requirements?

- What are the interventions that worked, so far?

## **Your company should actively manage the continuing process of acquiring competences by enhancing opportunities for learning within the organisation, in an individualized approach**

Tool 4.1.

Structure for of teamwork promotion and older workers

Tool4.2.

Framework for development of Quality Circles

Tool 4.3.

Grid for personalized learning paths

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

**POSSIBLE PROBLEMS/**

**OPPORTUNITIES**

- Completely performing experienced employee about to leave will drain important knowledge, skills and competences out from the organisation.

- Experienced workers that lack specific knowledge, skills and competences and about to be made redundant will decrease organisation competence pool, the company not being aware of his know-how.

- Only one or two employees, creating the risk of loss, hold critical skills.

- Facilitating the transfer of knowledge, skills and competences offers the organization more flexible options for the staff deployment in cases of capacity changes.

- Investment in know-how gap offers the company a guarantee that the learning opportunities it promotes are closely linked with individual/team work requirements and development aims of the organisation.

For SMEs there is also a real added value **integrating learning with the working processes** because:

- know-how transfer could take place without de-placing people to the training facilities and so saving resources;

- stimulates motivation as being directly linked with working place and environment;

- it offers a strong basis for a continuous learning process and so direct contribution to LLL of the company.

Your company should to be in a good position when competing with other companies for qualified personnel and, equally important, preserving as much as possible your existing know-how. But what are the possibilities for your organization to tackle the implicit knowledge retention and transfer? In most of the cases the know-how could be transferred by:

* **Socialization**: know-how remains tacit but it is developed by other employees by joint work activities, observation, discussions etc;
* **Formalisation:** a process of analysis, identification and documentation in manuals, internal regulations and other records of the company transform the tacit knowledge into explicit knowledge.
* **A combined approach**: company enhances the learning opportunities within organization and, starting from the existing know-how gaps, promotes both new socialization and formalisation activities.

For a long time companies acquired needed competence by obtaining qualifications outside their organisation, from the labour market, but this become increasingly difficult and expensive. This is why SKRAT strategy encourages you to use, as much as possible your own pool of competence and initiate learning processes directly relevant for the working requirements. The horizon of this approach is related to workplace-learning strategies to close the skills gap and preserve key know-how within your organisation.

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

**STRATEGY OPTIONS**

Formal vocational training programmes organised in house could be costly and difficult to support. Resources are needed for designing training curriculums, support materials for the trainees, trainer’s fees, as well as costs for substituting employees’ who go to training. Often a SME doesn’t have its own resources available to this end. This could be achieved by in-house strategies, such as assigning new roles to senior staff or inter-generational group work. To create a balanced knowledge, skills and competences and even a “know-how reserve” there are classical but also other proven successful methodologies.

Among **traditional methods** the best-known is *learning by doing,* a form in which worker shows directly to the learner how a specific activity is performed and offers explanations (about sequence, use of resources, unforeseen events etc.). More detailed are the instructions and experiences, more the learner could develop new skills and acquire knowledge through observation, practice and interaction with the person conducting the learning process.

More **recent/modern methods** are promoting more the learner autonomy and self-guidance. Among these we draw your attention on:

* **Self-organized learning** (individual learning programs or joint project groups). Intervention aimed at creating an orientation for self-learning process, it uses specific tools such as guiding questions to focus and to structure the planning of the learning process and assisting the learner to understand better the learning results, i.e. what specific know-how will be acquired. As in the case of documentation of working processes, your company should focus on knowledge, skills and competences essential to be transferred and should aim at making the information accessible and close to work requirements.
* **Teamwork and older workers.** A strong tool geared to inclusion of aged worker into the knowledge transfer processes is related to teamwork and the role of older workers in development and management of the teams- Tool 4.1 . Developed within Leonardo da Vinci Program coordinated by IG Metall and Sozialforschungsstelle Dortmund, Landesinstitut, the tool is part of a training program aimed at designing and implementing new ways of promoting mixed age groups, taking benefit from the experience of older workers. The advantages of mixed age groups are highly relevant also for the know-how transfer since they promote a hands-on experience of solving job related problems and create favourable learning opportunities for all workers involved. The tool addresses all main reasons of employees joining in groups: security, task achievement, social need and power. Besides enforcing a longer-term thinking and promoting a solidarity working method, the tool is also an effective way of combating exclusion.

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

* **Workshop/Learnshop**. An event organised and co-ordinated by a central *learnshop* in which the pedagogical and training/facilitation experts are sitting and conduct de-centralised *learnshops* in the production area, with the help of experienced workers. Usually the groups meet one to two hours once a week.
* **Learning islands.** A method enabling one part of the initial qualification to be developed directly in the production (at the work place), integrating qualified technical personnel as trainers. A pedagogical objectives catalogue orients all the processes, stating concrete knowledge, skills and competences to be transferred.
* **Quality circles.** Another powerful tool geared to inclusion of aged worker into the knowledge transfer processes is related to the development of in-company working groups for quality, *quality circles*- Tool 4.2.As indicated by L&W– Learn and Work Project (Leonardo da Vinci Pilot Project – www.learn-and-work.com), of special importance for the SME is to create working groups of 3 to 10 participants with different areas of expertise to analyse technical and organisational problems and search for solutions and improvements. It is important that the group has a leader orientating the work and facilitating the exchanges between team members. The expected impact is related to improvements in the working process flow and procedures, increase of efficiency and further development (at company level) and development of knowledge and skills (at individual and group level). It addresses technical but also transversal competences, such as problem solving communication or negotiation. The tool could offer solutions to problems related with the working sequence of processes so it has a direct impact also on co-operative self-learning and transfer oriented training process.
* **Continuous vocational programs/training courses**. Best promoted when working process can be interrupted for learning, allowing the worker to be autonomous to self-manage his/her own continuing learning process. It takes into account the resources required to develop specific know-how in cooperation with specific training providers. It range from induction to workplace to formal/informal trainings and self-learning at the working place and often can use new tehnologies.
* **Mentoring, coaching and tutorials**. Widespread solutions facilitating know-how transfer, with different emphasis on place, timing, content and organisational support.
* **Learning and working assignment**. Activities creating resources to enable your workers to be more competent, promoting context-related resources linked with work requirements.
* **Navigation system for self-learning workers.** Another example of self-learning process through six modules ranging from analysis of the working situation to discover learning possibilities, use knowledge resources and balance of learning processes.
* **Job shadowing.** Interventions aiming at backing one experienced worker with a less experienced one, creating ad-hoc working teams and know-how transfer opportunities.
* **Kaizen** – intervention aiming at creating learning situations and reflecting on the working experiences (see also workshop/learnshop).

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

- Learning new things with the help of an experienced colleague

- Learning by doing work with a growing degree of difficulty under the responsibility of

an experienced worker

- Learning by asking for help/advice from an experienced colleague

- Learning by practising with new machines/equipment in team with an experienced

worker

- Learning by regular rotation of tasks which can keep your skills up to date

- Learning by doing non-routine jobs with the help of experienced workers

- Learning by solving problems together with experienced colleagues

- Learning from experiences of clients/users of products, with the help of experienced

workers

- Learning by involvement in management, planning, in teams with senior staff.

In all these operational strategies the worker learn at the workplace WITH the working process and know-how is directly SUPPORTING learning processes. Besides enforcing a longer-term thinking and promoting a solidarity working method, these tools are also effective ways of **combating exclusion**. SKRAT puts a special emphasis on combating age-related exclusion at the work place, valuing the role of the experienced workers know-how in closing the skills gap identified in the previous steps.

Many companies acknowledge today that it is necessary to prepare the persons soon to be retired in order that they are open and ready to transmit the knowledge, skills and attitudes for the other members of the staff, especially the young and inexperienced ones. Through inter-generational learning, the aged workers could therefore transfer formally or informally the key know-how to younger colleagues. The know-how transmission, including also the new recruited staff, **offers the company the guarantee that key knowledge and skills are remaining within the organisation** and is not lost when these workers leave (voluntary or not) the company. Experienced workers could play a multiple role in improving the lifelong learning asset of the company also in situations related to **informal learning**, such as:

Contrary to current perceptions, ageing personnel is in no way the reason for regression or even a sudden breakdown of the innovative abilities of a company. The design of **integrated interventions to close the skills gap** and manage the continuing process of acquiring competences is one of the most relevant proofs. An active involvement of aged workers is therefore essential not only to individualisation of learning pathways (related to individual learners) but also to groups, departments, work teams etc.

Compulsory activities

On the job development / Professionalising job situations

Learning opportunities

**Periodic monitoring** activities

Starting position evaluation

Learning/Professional development aim

These shortcomings of looking for training providers outside the company might be also overcome by identifying vocational training offers of specialised suppliers who operate on the market and who develop such programmes for a larger number of enterprises. However, you have to be aware that you need to measure yourself the impact of such program, taking into account both the effectiveness (*objectives were met?)* and efficiency (*at what costs?*).

Drawing a know-how map of your company, you can target all these learning activities to the working processes where you have identified the most important skills gaps. At the same time, you can foresee the know-how future gap in the areas that will be re-structured in the future (i.e. due to company grow, promotion of new services/products etc.). In all cases, SKRAT methodology proposes also Tool 4.3 promoting the model of a personalized learning/professional development path for your employees.

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

**STEP 4. Design integrated interventions to close the skills gap and transfer know-how**

**PRACTICAL HINTS**

* Combine appropriate tools and avoid the situation that you have to do this in a very limited time window.
* Try to imagine the learning development methodologies linked with your short, medium and long term development needs
* Network with colleagues to discuss positive experiences and find out how they did it
* Study good practices in other companies
* Find help for external facilitators (information on consultancy services and other resources available could be provided on request by the project partners)
* Pilot the implementation of specific learning methodologies on smaller scale and evaluate results before deciding to use it as a general practice
* Train or have trained employees as implementing agents or facilitators for the selected methodologies.

No matter what will be the strategy selected, you should take into consideration that the process focusing on inter-generation learning should be taking into account in various forms, as in the figure below:

For each operational strategy you decided to use, you should check if you have achieved the expected results and at what costs (how cost-effective your interventions are). For this you need to evaluate and constantly revise your interventions.

Evaluating and assessing measures serves a number of purposes. Evaluation carried out during the process (formative evaluation) can help uncover possible weaknesses in its conception or implementation, enabling remedial steps to be taken before the end of the process. You are assured therefore that unexpected events, side-effects or challenges will not threat the whole intervention and that you have a control on each activity, in a more effective process.

The final evaluation of your interventions (the summative evaluation) will indicate its overall benefits, both for the employees as well as for the organisation. Even though the success of such measures is not always easy to quantify, each operational strategy but also the overall strategy of know-how retention and transfer should be assessed. With the help of your employees or staff representatives you will know in detail:

* what are the outputs/outcomes of each intervention?
* what are the most important results?
* to what degree the impact is close to what it was expected?

Your evaluation should ultimately indicate if your know-how retention, seen as a permanent process/concern of your organisation must be significantly revised and what are the main driving forces in this process.

The Tool 5.1 aims at offering you a reference in structuring your monitoring and evaluation process, both for specific interventions and for the integrated strategy. The main questions framing your evaluation are referring to the process characteristics (cooperation between actors, resources in place, threats/unforeseen situations etc.) and also to the **quality of the results achieved**:

* how complete and accurate were the key processes/tasks identified?
* how complete and accurate were the needed/existing knowledge, skills and competences defined?
* what were the interventions leading to an effective know-how transfer?

You could gather critical people for the process and reflect to all these questions aiming at understanding better the process, the outcomes and the costs of the strategy.

Tool 5.1.

Structure of regular monitoring and evaluation meetings

Tool 5.2.

Grid for revising key interventions of the integrated strategy

## **All your interventions inspired by SKRAT approach should be closely monitored, evaluated and revised**

**STRATEGY OPTIONS**

**STEP 5. Monitoring, evaluation and revision of your interventions**

**PRACTICAL HINTS**

* Depending on your available resources, you can decide to test all the interventions or focus only on the most relevant ones.
* Try to get information from all actors involved related both to the process and the outcomes of your intervention, think of each worker role in helping understanding better the process, the outcomes and the costs implied.
* When you revise, based on your analysis results, the logic of your steps and decide to eliminate the operational activities and related tools state clearly the criteria/rationale.
* Think of what is important for your organisation and decide to keep the interventions you find effective (in relation with costs, existing know-how to implement, visible impact etc.).
* Define specific, measurable, relevant targets for your strategy to be used in all evaluation activities.

**STEP 5. Monitoring, evaluation and revision of your interventions**

While the monitoring process should be realised on a regular basis, the summative evaluation activities should be carried out once the full process is ended. Depending on how much time the other steps take, you should organise this as half-day meetings, with a prior information of all participants about the scope and the resources in place.

The Tool 5.2 goes further in this step, linking the data gathered within the evaluation process with the interventions aimed at revising know-how retention and transfer strategy.

In particular, this tool is offering you the opportunity to **actively promote experienced workers as knowledge workers** in fine-tuning your strategy. There are two major areas of concern, one related to the quality of analysis process outcomes (i.e. identification of tasks, definition of needed competences and know-how, assessment of existing knowledge within the company and the know-how gaps) while the second one is concerned with the effectiveness and efficiency of the know-how transfer interventions (i.e. key knowledge, skills and competences that were successfully transferred from experienced workers to their colleagues).

At the same time, your evaluation activities should investigate and fundament your **equal opportunities** policies. Effective know-how retention is not possible without you taking into consideration gender issues, disabled persons or minority’s rights and specific incentives to assure equal access and impact of know-how assessment and professional development initiatives.

The decision to finish the active life is complex and involves balancing financial considerations with personal preferences and practicalities. There is no clear-cut pattern since for some, retirement is the point at which work stops, and for others it is simply when they begin to draw their state pension, but continue to work.

You should take into account that white collar or ‘knowledge workers’ have more choice about when to retire. On one hand many are able to continue to work for longer given the less physical nature of their jobs, and on the other, given that on average knowledge workers earn more over their working lives they may be in a financial position to retire early, or at least to have that choice. **Creating incentives for people to work for longer** is arguably more equitable and means that older people who have long career histories (most likely to be blue collar workers) are not expected to work as late into life as those who don’t (more likely to be knowledge workers). Asides from finance, your organisation should consider other key factors to whether or not older workers decided to continue to work, or to retire, included HRD management and flexible working program.

Older workers just like the rest of the personnel or even in a higher proportion, **tend to leave employment if they are poorly managed**. Therefore you should be potentially addressed by training of people with managerial responsibilities to manage older people effectively, whilst a lack of flexibility about when and how to work can also be a contributing factor to an older person’s decision to leave the labour market.

Older workers have substantially lower employment rates, suffer from greater long term unemployment, are less likely to make the transition out of inactivity, and often have to accept substantial reductions in their earnings when they find a new job.

## **All your activities aiming at removing the barriers for learning are complementing and increasing the impact of your strategy for know-know retention and transmission**

Tool 6.1.

Quick questionnaire for age friendly environment check

Tool 6.2.

Key worker initiative and other job rotation schemes

Tool 6.3.

Career Plans for Senior Workers

**Overcoming learning barriers. Transversal measures**

There are many causes of this disadvantage, several of which are driven or at least closely related to skill levels and lack of recent training. Providing older workers with additional skills **would only make a difference if employers value them**.

Another reason for current learning barriers is the lack of reasons, motivation and incentive for learning of the employees. It is therefore necessary to link the learning strategies with the work processes and develop new forms of learning. The challenge for adult education is in focusing attention on didactic and theoretic questions in education of older people and to query how learning may be designed in age-heterogeneous groups.

The issue of motivation of aged workers both for investing in their own professional development and for accepting the role of formal/informal trainers and mentors for their younger colleagues is very important.

Evidence shows also a **learning resistance** as individuals do not see the importance of LLL measures for their future employability nor for the know-how retention within the company. Tackling the learning barriers is reported as being of a similar importance than the priority of making the SMEs in metal sector more conducive to learning. SKRAT offers the suggestion for use Tool 6.1 , an online “quick-check” questionnaire to analyse whether an age-friendly working environment is offered by your organisation (detalis at [www.wage.at](http://www.wage.at))

Contrary to current perceptions ageing personnel is in no way the reason for regression or even a sudden breakdown of the innovative abilities of society. It will be rather the intra-company conditions that will entail that ageing personnel in companies that are not yet geared to an age-adaptable learning job organisation, which is also conducive to learning, for their staff member will suffer a decrease of their innovative capabilities.

Senior workers with managerial/supervision responsibilities could be involved in job rotation–type of activities, such as key worker initiative - Tool 6.2 , developed within a national program in United Kingdom. This tool offers a strong incentive for experienced workers to be involved in the training of employees with promotion potential since they could always be covered during unexpected absences, if they change jobs or retire. This tool is in line with the recommendations of assigning new roles to senior staff and development of flexible working conditions.

Other related models of intervention are specific to an approach created in the Northern Europe countries in the middle of the 90s – job rotation – aimed at meeting the flexibility needs of training demanded by the companies and the human resources. It is an employment and training tool that has to have the approval of as many actors as possible, both public and private and was widely used both in private companies and in public interventions (i.e. Portugal).

It uses different tools allowing, on one hand, the unemployed people to have a real working experience and, on the other hand, the workers to achieve an improvement of their professional competences, contributing to an increase of the company competitiveness. Some of the relevant tools could be find on the platform **www.jobrotation.de.**

**Overcoming learning barriers. Transversal measures**

It is not in all cases possible to organize the transfer of know-how within your organisation. You should acknowledge that often, experienced workers, having an important capital of know-how (formally recognized or not), **are reluctant to transmit their knowledge**, seen as a *wild card* assuring their employment security. Besides undermining their know-how position, employees’ participation to training or other forms of new competence acquisition determines a passive or defensive position when involved in the professional development activities.

# In order to clarify and face these challenges, SKRAT strategy indicates Tool 6.3, assisting you in discussing with your aged workers **all main components of their career plan, including:**

* wage level and/or other advantages;
* job responsibilities (including projections for the future);
* promotion opportunities or of switching to another position;
* attractiveness of the activity field in relation to expectations;
* impact of individual performances and/or of company ones on the individual;
* participation to professional development activities;
* social and other motivational aspects.

In particular, the tool is offering a basis for the:

* **Analysis of employee’s professional results** – comprising basic occupation, key positions, facilities offered by the company to the individual and novelties brought by the employee in achieving company goals;
* **Analysis of employee’s aspirations, motivation and potential** – with respect to the position he takes in the professional life as against family life, perspectives and fears related to professional risk;
* **Vocational orientation** – the extent to which the held job within the company is right to the individual’s traits;
* **Means of adjustment to made option** – weighing out qualities, which recommend the individual for taking a certain position, with limits resulting from the evaluation process;
* **Strategy of achieving the proposed plan** – determining the calendar plan on intermediary stages of action.

Details about other related interventions aimed at increasing experienced workers motivation can be learned also from the outcomes of the project *Teamwork and older workers* (IG Metall Leonardo da Vinci).

A comprehensive presentation of the challenges related to strategies involving aged workers could be found in the Report no. 22 *Older people inside and outside labour market. A review* published by the Equality and Human Rights Commission (authors: Deborah Smeaton and Sandra Vegeris). It can be accessed at **www.equalityhumanrights.com.**

OVERCOMING LEARNING BARRIERS

TRANSVERSAL MEASURES

The most important added values of SKRAT approach for the company are referring to:

* developing own tools and policies in order to face the competence gap challenge.
* capitalize knowledge and know-how and organize a transfer.
* creating a management tool to evaluate the competences and learning map schedule, helping to manage the worker’s career in the enterprise, in the professional branch.
* stimulate a pro-active approach in the age management policies
* accurate identification of existing know-how and prevention of know-how drain
* a general tool for mobility and competences provisional management.

At the same time, the methodology could have a direct positive impact for the worker:

* In the area of identification of professional competences acquired through experience and informal or not formal learning.
* Possession of a document valorising and recognising the evaluated competences.
* A documented competence report, with relevant information about his/her professional achievements.
* Create incentives for LLL and professional development even for the workers close to the retirement age.
* It can enhance/support mobility and qualification processes.

SKRAT also addresses the need to **change attitudes towards ageing and its consequences** as a first step in fostering continuous learning and promoting ‘age-friendly workplaces’ that promote learning; employers with a strategic approach of age management investing in the learning culture of the organisation could expect to have employees, regardless of age, that are more receptive and reacting better to change, **offering the company the needed flexibility for a more competitive and globalized market**.

It is of crucial importance for the management of the SMEs to embed these new attitudes towards ageing and learning in the **daily activities of their organisation** and **constantly review** and **develop new tools** for building inclusive and learning supportive workplaces for people as they are growing older.

NATIONAL TEAMS/contact person/institutional logo

KEY MESSAGE OF THE GUIDE:

*This Guide is an invitation for employers, employees and social partners to reflect on their existing initiatives and practices aimed at preserving the most valuable asset of an organisation: its know-how. The Guide offers both an instance to validate these experiences but also it offers suggestions for new activities, embedded in a coherent overall strategy.*

COVER 4

Better use of your resources: a strategy for know-how retention and transfer.

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