

Q-PLM

Quality Assurance for VET Providers Using Product Lifecycle Management

LdV/TOI

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WP 6: Development of software and handbook

WP 6: Report on Variables and Indicators for product lifecycles in Vocational Education and Training

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Defined aims of Work package 6

The main aims of the work package are:

- 1) Discussion of the experiences and good practice identified from the research and analysis phase
- 2) Development of a collection of technical and functional specifications for the PLM software for VET providers
- 3) Identification of a software development organisation able and experienced in the sector
- 4) Development of a beta version of the software for product lifecycle management in EN language as basis for the testing phase
- 5) Development of the draft version of the product lifecycle management handbook in addition to the software for the testing phase

To achieve the work package objectives the following activities are planned in the work package:

- 1) In depth discussion of the results of the analysis and research phase within the partnership during the second transnational partnership meeting and elaboration of a development timetable for the software beta version and the draft version of the handbook
- 2) Identification of variables relevant for active product lifecycle management in the field of VET as well as of reliable indicators for all variables selected
- 3) Set-up of feedback panels of experts and stakeholders in all partner countries involved
- 4) Discussion of the analysis and research results in the feedback panels in each partner country involved and elaboration of important technical and functional specifications for the software as well as elements for the draft version of the handbook
- 5) Publication of a public call for tender for software companies interested in developing the PLM software for VET providers and selection of the best offer on value for money basis by partner P1
- 6) Finalisation of the technical and functional specification document as basis for the programming of the beta version of the PLM software for VET providers
- 7) Development of a draft version of the PLM handbook for VET providers
- 8) Programming of the PLM software for VET providers including at least 3 feedback loops *Quality assurance for VET providers using product lifecycle Management/ Q-PLM Page 82 of 106* with project partners and the feedback panels in the partner countries to receive immediate feedback on developed elements

Milestones for the work package are:

- Short feedback reports from all feedback panels in the partner countries with draft technical and functional specifications
- Public tender for selection of the IT Company for software development
- Description of variables selected as being relevant and valid for active product lifecycle management in VET together with their indicators and measures
- Technical and functional specifications document for software development finalised

- At least three feedback rounds implemented with national feedback panels during the Software development process to achieve a reciprocal and interactive development steps
- Beta version of the PLM software for VET providers
- Draft version of the PLM handbook
- 3 feedback rounds performed for the PLM software beta versions with national feedback Panels

Defined aims of the Report: Variables and indicators for product lifecycles in VET

On the basis of the analysis and research report elaborated as well as on the basis of discussions held in the second partnership meeting and feedback received from feedback panels in the partner countries P6 and P1 will develop a common report about variables influencing product lifecycles of VET offers together with relevant and reliable indicators for the single variables. The report will contain the selection of 10 most relevant variables, their indicators and measurement as basis of the development of the PLM software and the handbook.

Actual Research Phase and Methodology

This report on Variables and Indicators for product lifecycles in Vocational Education and Training has been produced in combination with the report on Technical and functional specifications for the PLM software and the Report on Feedback from the panels of experts and stakeholders. It follows on from the Work package 5 Research & analysis report. This report contains details regarding all of the identified Indicators, Key Success factors and Stages of production in Vocational Education and Training Product Lifecycle as our research served to highlight the interrelationship between these elements and to reduce the report to only looking at ten sample indicators would lose the essence of the work that has been done.

One of the key first steps in this part of the project was to clarify the language being used. There was considerable variation between partners as to how terms such as variables, indicators and Key Success Factors were being used. It was decided that Indicators would represent the individual variable factors that influence Product Lifecycle such as Feedback from Students, Market Share, Legal obligations and participation rate. Variables then are the things that we do not control that influence Indicators. As such variables are not measured within the PLM process but may give an explanation as to why an indicator is returning a particular result. Key Success Factors are dependent on the grouping of indicators that influence them and in turn Product Lifecycle is influenced by the Key Success Factors. In clarifying these terms we have moved somewhat from the terminology of the original project proposal. Bearing this in mind the current report would be more correctly named as **Report on Indicators and Key Success Factors for product lifecycles in Vocational Education and Training.**

Substantial discussion took place between the partners to identify the Indicators that influence Key Success Factors and consequently Product Lifecycle within Vocational Education and Training. The list of indicators identified was then streamlined and clarified. The fact that some indicators may not apply to all VET providers also had to be considered so it was decided that a weighting system needed to be introduced into the software. This in effect would allow the software user to remove an indicator by assigning it a weighting of zero, it would also allow critically important indicators to be identified by giving them the highest weighting. Indicators with this weighting must be met in order for a product to continue its lifecycle.

Indicators

The indicators influencing Product Lifecycle Management in Vocational Education and Training were identified through discussion forums at partnership meetings and through additional work carried out by individual partners in consultation with local stakeholders. Further clarification of indicators was carried out by partner 1 following consultation with the software developer.

The list of indicators identified is given below along with a short description of each indicator in order to improve clarity. It is important to bear in mind that we do recognise the fact that some indicators may not be relevant in specific circumstances and others may take on a key significance. The software will allow for this through the weighting system for indicators described later in the report. It may also occur that one or another indicator will be redefined or arranged in an other way, during the next steps of the development of the software.

Successful completion of training

What percentage of trainees have reached the training goals / competences? Graduated scale 1-10 (where 10 is 100%)

Success rate of the course

On which level has the course achieved it's defined objectives? Graduated scale 1-10 (10: all objectives fully met, 1: failure to achieve objectives)

Attractiveness and relevance of teaching techniques employed

How attractive are the teaching techniques employed (based on students / participants feedback)? Graduated scale 1-10 (10: very good technique, 1: poor technique)

Appropriate duration

How appropriate is the duration of the training programme (concerning content, learning effort, market, amount of time required by the students, competitiveness to other VET providers)? Graduated scale 1-10 (10: perfect, 1: bad)

Appropriate learning content

How appropriate is the learning content (concerning the student's needs, market needs, employers needs, balance between theoretical and practical training, innovative and informative value for students...) Graduated scale 1-10 (10: perfect, 1: bad)

Investment in motivation of participants

Do we (still) have to invest in (future) target groups? If yes: are we able to and do we want to invest in target groups? Graduated scale 1-10 (10: 100% affordability 1: 0% affordability, investment to high)

Innovation

How innovative is the VET product (level of innovation)? Graduated scale 1-10 (10: very innovative, 1: not innovative)

Entrance requirement for students / participants

Fulfilment of entry requirements of the course? Graduated scale 1-10 (10: totally fulfilled, 1: no level of correspondence)

Continued course pathway / Progression into further levels

Is it possible to progress into further educational and / or course levels within the provided training programme? Graduated scale 1-10 (10: proved future levels 1: no progression at all possible)

Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)

Does the training programme also focus on general soft and social skills and competences (team work, soft skills, presentation techniques, time management...)? Graduated scale 1-10 (10: high level of integrated soft and social skills 1: no soft and social skills integrated)

Recognition of European standards (ECVET, ECTS, EQF,...)

Does the training programme recognise European standards like the ECVET oder ECTS system, the EQF, etc.? If yes: how important is the European standardisation for this product? Graduated scale 1-10 (10: high level of recognition of European standards, 1: no recognition of European standards)

Methodological and pedagogical concept

How appropriate are the methodical and pedagogical concepts corresponding to the learners' needs? Graduated scale 1-10 (10: high level of correspondence 1: no correspondence)

Constantly updating programmes (effort to keep updated programmes)

Do we have to update this VET offer regularly and is it worth the effort? Graduated scale 1-10 (10: it is absolutely worth the effort, 1: no, it's not worth the effort)

Participation rates

Is there a sufficient number of participants? Number of required persons vs. actual participants as a percentage. Graduated scale 1-10 (where 10 is 100%)

Feedback by trainees

Has trainee feedback been positive? Graduated scale 1-10 (10: Trainees are totally satisfied with the course. 1: Trainees are totally unsatisfied with the course)

Feedback by employers

Are employers happy with the course being offered? Graduated scale 1-10 (10: Employers are totally satisfied with the course. 1: Employers are totally unsatisfied with the course)

Evaluation of seminars, feedback, satisfaction within the training programme

What is the level of satisfaction within the VET programme? Graduated scale 1-10 (10: very high satisfaction, 1: no satisfaction)

Absenteeism figures (= measurement of quality, of course, of choice, of motivation - except absenteeism because of illness, job reasons, etc.)

Percentage rate of student absenteeism during the course? Graduated scale 1-10 (10: very low level of absenteeism 1: very high level of absenteeism)

Percentage of training contents taught

What is the percentage rate of training contents taught on schedule? Graduated scale 1-10 (10: totally on schedule 1: significantly behind schedule)

Level of knowledge kept after finished VET

What's about the level of knowledge kept after the finished VET? (Evaluation, feedback of customer/company/trainee) Graduated scale 1-10 (10: high level of knowledge 1: no kept knowledge)

Return on investment for employers

Return on investment reports, feedback, evaluation in companies. Graduated scale 1-10 (10: very high return 1: no return)

The level of investment in the training of trainers

Do you have to invest in the training of trainers and how important is the investment by taking into account the cost and time involved? Graduated scale 1-10 (10: it is worth the effort, 1: it is absolutely not worth the effort)

The level of investment in the competences of administrative and general staff members

Is there an administrative staff cost / requirement associated with this project. How viable is this from a cost / staffing perspective? Graduated Scale 1-10. (10: high viability, 1: no viability)

Enough and qualified staff available (trainers, call centre, organisational staff, managers,...)

Is there enough and qualified staff available? Graduated scale 1-10 (10: enough qualified staff; 1: no (more) staff)

Practical experience of teachers / trainers

On which level is the teachers'/trainers' required practical experience? Graduated scale 1-10 (10: very high practical experience 1: no practical experience)

Pedagogical competence of trainers

Pedagogical competences are proved by relevant experience, formal test(s), by evaluation, by participants' feedbacks. Graduated scale 1-10 (10: high level of pedagogical competence 1: very low level of pedagogical competence)

Sustainability of the VET offer

What is the level of the sustainability of the VET product? (e.g. destination of trainees six months after completing their training. Have trainees achieved employment as a result of their training or have they progressed to a higher level of training?) Graduated scale 1-10 (10: highest sustainability, 1: no sustainability)

The use of acquired skills in the workplace

Are people able to use the acquired skills in the workplace? Graduated scale 1-10 (10: very well, 1: not at all)

Focus on the levels of unemployment in different social groups

Does this course fulfil the specific needs to train unemployed people from different social groups? Graduated scale 1-10 (10: very well, 1: not at all)

Prevalence of vulnerable groups in the VET system

Does the course fulfil the needs of specific vulnerable groups (e.g. disadvantaged groups, migrants, lone parents etc.) Is this a factor in running the course? Graduated scale 1-10 (10: very well, 1: not at all)

Relation between labour market and VET offer

Has the need of this product been related to the labour market needs? Graduated scale 1-10 (where 10 is 100%)

Legal obligations

Do we have to refer to any legal obligations? Do we have to adapt the seminar regularly to legal obligations? Is it worth the effort? Graduated scale 1-10 (10: it is worth the effort, 1: it is absolutely not worth the effort)

Enrolment rate (expected and actual enrolment rate), participants rate

Do we have enough participants? Graduated scale 1-10 (10: very high enrolment rate, 1: very low enrolment rate)

Market potential

Level of market potential for the VET product Graduated scale 1-10 (10: high, 1: very low to zero)

Market share

Level of market share for the VET product. Graduated scale 1-10 (10: high, 1: very low to zero)

Ability to adapt with little effort to target groups, to market needs

Are we able to adapt the VET offer to other target groups, to market needs, to companies' needs?
Graduated scale 1-10 (10: very high and easy adaptability; 1: no possibility of adaptation)

Flexibility in offering this VET offer (flexibility in time, place, in delivery...)

Are we able to offer this VET offers flexibly in place and time? Graduated scale 1-10 (10: very high flexibility; 1: no flexibility)

Anticipation of regional / national / EU / etc. policy and developments

Does the VET offer/product correspond to international or national, regional laws and regulations?
Graduated scale 1-10 (10: high level of correspondence, 1: no level of correspondence)

Cost analysis

Do incomes cover costs? Graduated scale 1-10 (10 : yes, totally, 1: no, not at all)

Affordable price for participants

Is the price affordable for participants? Graduated scale 1-10 (10: affordable fee 1: too expensive)

Infrastructure

Do we have the appropriate infrastructure to offer that training programme? If no: are we able to and do we want to invest in the appropriate infrastructure? Graduated scale 1-10 (10: 100% affordability 1: 0% affordability (investment to high)

The existence of programmes to allow access to VET courses

Is there a programme available to support this VET course? E.g. local, regional, national, European, governmental programmes and key aspects to support and allow VET courses. Graduated scale 1-10 (10: high support, 1: no support)

Sponsorship

Available sponsorship / fundings and do we need them? Graduated scale 1-10 (10: yes, high grant 1: no grant)

Interest of other VET providers

Are other VET providers interested in running this course on our behalf or through a licensing arrangement? Graduated scale 1-10 (10: significant interest, 1: no interest)

External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)

Does the course attract attention by media; stakeholders confirmed their interest in a course; partners show formal interest in a course Graduated scale 1-10 (10: very high interest 1: no stakeholder interest)

Stakeholder opinions (social partners, professional organisations, public bodies, funders...)

Stakeholders invest in the course. Graduated scale 1-10 (10: very high level of support; 1: no support)

Importance of a course to the VET provider (image)

Relevance of the training programme in the portfolio of the VET provider (image)? Graduated scale 1-10 (10: very high image, 1: no relevance)

Feedback by trainers

Has trainer feedback been positive? Graduated scale 1-10 (10: Trainers are totally satisfied with the course. 1: Trainers are totally unsatisfied with the course)

Feedback by organisational staff

Has general staff feedback been positive? Graduated scale 1-10 (10: Staff are totally satisfied with the course. 1: Staff are totally unsatisfied with the course)

Certification

Do we have the appropriate certification and what is its value (for the participants, for the labour market and/or is the certification officially recognised by the labour market)? Graduated scale 1-10 (10: perfect certification, 1: insufficient certification)

Key Success Factors

Key Success Factors are factors that directly affect customer satisfaction such as cost, quality, time and innovative products and services. The combination of important facts that is required in order to accomplish one or more desirable business or educational goals. Within Product Lifecycle Management Key Success Factors allow us to combine the indicators listed above into a smaller number of important factors that will ultimately determine the success or failure of a VET product and should determine the Product Lifecycle of that product.

The Key Success Factors in VET were identified in a manner similar to that advanced for the indicators. Ten Key Success Factors were identified and each of these was linked to the indicators that would have an influence upon it. It became clear that some indicators effect multiple Key Success factors while others only influence one.

As we had decided to adopt a weighting system for indicators this will clearly have an influence on the importance of each Key Success Factor to an organisation. It was decided that the weight of a Key Success Factor would be determined by the combined weight of the indicators influencing it. So the weight of a Key Success Factor is the combined weight of its indicators divided by the number of indicators influencing the Key Success Factor.

The Key Success Factors are listed below along with the Indicators that influence them.

KSF 1: Quality of VET Training

Indicators

- Successful completion of training
- Success rate of the course
- Attractiveness and relevance of teaching techniques employed
- Appropriate duration
- Appropriate learning content
- Investment in motivation of participants
- Innovation
- Entrance requirement for students / participants
- Continued course pathway / Progression into further levels
- Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)

- Recognition of European standards (ECVET, ECTS, EQF,...)
- Methodological and pedagogical concept
- Constantly updating programmes (effort to keep updated programmes)

KSF 2: Customer Satisfaction

Indicators

- Participation rates
- Feedback by trainees
- Feedback by employers
- Evaluation of seminars, feedback, satisfaction within the training programme
- Absenteeism figures (= measurement of quality, of course, of choice, of motivation - except absenteeism because of illness, job reasons, etc.)
- Percentage of training contents taught
- Level of knowledge kept after finished VET
- Methodological and pedagogical concept
- Return on investment for employers

KSF 3: Quality of the Staff

Indicators

- The level of investment in the training of trainers
- The level of investment in the competences of administrative and general staff members
- Enough and qualified staff available (trainers, call centre, organisational staff, managers,...)
- Practical experience of teachers / trainers
- Pedagogical competence of trainers

KSF 4: Responding to Market Demands

Indicators

- Sustainability of the VET offer
- The use of acquired skills in the workplace
- Focus on the levels of unemployment in different social groups
- Prevalence of vulnerable groups in the VET system
- Relation between labour market and VET offer"
- Legal obligations
- Enrolment rate (expected and actual enrolment rate), participants rate

- Market potential
- Market share
- Ability to adapt with little effort to target groups, to market needs
- Flexibility in offering this VET offer (flexibility in time, place, in delivery...)
- Anticipation of regional / national / EU / etc. policy and developments
- Constantly updating programmes (effort to keep updated programmes)
- Innovation

KSF 5: Cost Control

Indicators

- Cost analysis
- Affordable price for participants

KSF 6: Suitability of Infrastructure and Material

Indicators

- Infrastructure

KSF 7: Stakeholder Engagement

Indicators

- The existence of programmes to allow access to VET courses
- Sponsorship
- Interest of other VET providers
- External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)
- Stakeholder opinions (social partners, professional organisations, public bodies, funders...)

KSF 8: Strategic Provider Benefits

Indicators

- Importance of a course to the VET provider (image)
- Innovation

KSF 9: Evaluation Mechanisms

Indicators

- Feedback by trainers
- Feedback by trainees
- Feedback by organisational staff
- Methodological and pedagogical concept
- Feedback by employers

KSF 10: Appropriate Certification

Indicators

- Successful completion of training
- Success rate of the course
- Certification
- Recognition of European standards (ECVET, ECTS, EQF,...) Question: is ECVET- system adapted ?

Stages of product development process for VET providers

The Product Lifecycle of a Vocational Education and Training course clearly occurs within four distinct phases. These were identified as:

Design / decision

During this phase decisions are made as to whether any work should take place towards the development of a VET product, does the product have any level of viability? A decision has to be made as to whether investment both financial and in terms of staff time should be given to further development of the product.

Development

Once the initial viability of a product has been established investment is committed to the development of the product. Course content is established at this point, training or recruitment of staff, checking that appropriate certification is in place, investment in infrastructure may be required. Advertising can take place and enrolment can commence.

Delivery

The course is now running. There will be feedback from the stakeholders, are targets being achieved, is attendance level good.

Evaluation

As the course nears completion or has been completed normal evaluation techniques are employed. Has the course achieved its goals? Were the stakeholders satisfied with the results? Should the course run again and if so what changes should be made? Furthermore it needs to be pointed out that in some cases evaluation may also be a permanent process.

Each of these phases has specific indicators that are relevant to that phase. These were identified as follows:

Design / decision

- Successful completion of training
- Success rate of the course
- Attractiveness and relevance of teaching techniques employed
- Appropriate duration
- Investment in motivation of participants
- Innovation
- Entrance requirement for students / participants
- Continued course pathway / Progression into further levels
- Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)
- Recognition of European standards (ECVET, ECTS, EQF,...)
- Methodological and pedagogical concept
- Participation rates
- Return on investment for employers
- The level of investment in the training of trainers
- The level of investment in the competences of administrative and general staff members
- Enough and qualified staff available (trainers, call centre, organisational staff, managers,...)
- Practical experience of teachers / trainers
- Pedagogical competence of trainers
- Focus on the levels of unemployment in different social groups
- Prevalence of vulnerable groups in the VET system
- Relation between labour market and VET offer
- Legal obligations
- Enrolment rate (expected and actual enrolment rate), participants rate
- Market potential
- Flexibility in offering this VET offer (flexibility in time, place, in delivery...)
- Anticipation of regional / national / EU / etc. policy and developments
- Cost analysis
- Affordable price for participants
- Infrastructure
- The existence of programmes to allow access to VET courses
- Sponsorship
- Interest of other VET providers
- External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)
- Stakeholder opinions (social partners, professional organisations, public bodies, funders...)
- Importance of a course to the VET provider (image)
- Certification

Development

- Attractiveness and relevance of teaching techniques employed
- Appropriate duration
- Appropriate learning content
- Entrance requirement for students / participants
- Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)
- Recognition of European standards (ECVET, ECTS, EQF,...)
- Methodological and pedagogical concept
- The level of investment in the training of trainers
- The level of investment in the competences of administrative and general staff members
- Practical experience of teachers / trainers
- Pedagogical competence of trainers
- Legal obligations
- Enrolment rate (expected and actual enrolment rate), participants rate
- Cost analysis

Delivery

- Appropriate duration
- Innovation
- Entrance requirement for students / participants
- Methodological and pedagogical concept
- Methodological and pedagogical concept
- Participation rates
- Absenteeism figures (= measurement of quality, of course, of choice, of motivation - except absenteeism because of illness, job reasons, etc.)
- Percentage of training contents taught
- Enough and qualified staff available (trainers, call centre, organisational staff, managers,...)
- Relation between labour market and VET offer
- Legal obligations
- Enrolment rate (expected and actual enrolment rate), participants rate
- Market potential
- Market share
- Flexibility in offering this VET offer (flexibility in time, place, in delivery...)
- Anticipation of regional / national / EU / etc. policy and developments
- Cost analysis
- Affordable price for participants
- The existence of programmes to allow access to VET courses
- Sponsorship

- Interest of other VET providers
- External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)
- Certification

Evaluation

- Attractiveness and relevance of teaching techniques employed
- Appropriate learning content
- Innovation
- Methodological and pedagogical concept
- Participation rates
- Feedback by trainees
- Feedback by employers
- Evaluation of seminars, feedback, satisfaction within the training programme
- Absenteeism figures (= measurement of quality, of course, of choice, of motivation - except absenteeism because of illness, job reasons, etc.)
- Percentage of training contents taught
- Level of knowledge kept after finished VET
- Return on investment for employers
- Sustainability of the VET offer
- The use of acquired skills in the workplace
- Enrolment rate (expected and actual enrolment rate), participants rate
- Market share
- Cost analysis
- Affordable price for participants
- Interest of other VET providers
- External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)
- Stakeholder opinions (social partners, professional organisations, public bodies, funders...)
- Importance of a course to the VET provider (image)
- Feedback by trainers
- Feedback by organisational staff
- Certification

The importance of this to the Product Lifecycle Management software lies in the fact that a product may be abandoned at a particular phase and may not complete all of the stages of its projected lifecycle. Many products may not get beyond phase one. For this reason it is important that the PLM software should be able to run on a single phase of the lifecycle, using only the indicators relevant to that phase and returning a result for the single phase examined.

Weighting and Measurement

At the partner meetings quite a degree of discussion took place regarding how we should apply measurement of Key Success Factors and indicators. One of the first concerns advanced was the fact that in some circumstances some indicators may not be relevant to course development or implementation. For example a course being provided to long term unemployed people for government may not rely on Cost Analysis indicators or may be required to run regardless of participation rate indicators. We clearly needed to find a way of incorporating special requirements / conditions into the QPLM software. The solution we adopted was to allow the user to give a weighting to each indicator. This weighting can be changed at any time but allows each organisation using the software the flexibility to adapt the individual indicators importance to their own particular situation. An indicator that is given a value of zero will not be considered when the QPLM program runs. All other indicators can be assigned an importance between 1 and 10. It was suggested that there may be a case to convert this weighting process into words as different people may interpret a 1 – 10 scale differently. So for example:

- Indicator not relevant to this product: Weighting 0 (effectively this result removes the indicator from the process)
- Indicator not very important to this product: Weighting 2
- Indicator somewhat important to this product: Weighting 4
- Indicator of average importance to this product: Weighting 5
- Indicator is important to this product: Weighting 8
- Indicator of crucial importance to this product: Weighting 10

As explained above the weight of a Key Success Factor will be calculated based on the weight of the Indicators that are tied to it. So the weight of a Key Success Factor is the combined weight of its indicators divided by the number of indicators influencing the Key Success Factor.

Keep in mind that all remaining indicators at this stage are relevant as any irrelevant indicators would have been removed by being assigned a zero weighting. It is important that there should be no confusion between what is meant by **weighting** and what is meant by **measurement**.

Once an indicator has been given a weight we next need to measure the success of that Indicator. In this case we decided to do this on a 1 to 10 scale. In most cases this will require that actual data collected related to the VET product will have to be converted to this scale. Examples of how this will be achieved have been given in the Indicator section above. But for example the Indicator of participation rate will be collected as a percentage and then converted to the 1 to 10 scale. If there is

a 70% participation rate then this is indicated in the PLM program with a value of 7. In all cases it is important to remove as much subjectivity from this process as possible as it is clear that the results returned by the PLM program will only be as good or as valid as the data input. For this reason and to avoid issues where users may wish to avoid extreme values it is suggested that the user should be given text choices for each indicator and that these should then be converted by the program to their numeric value. We have already seen how this could be done where an indicator returns a percentage result, entering the percentage into the program will automatically assign the correct 1 to 10 value. For indicators where percentages are not used a system similar to that suggested for weighting can be adopted. For example in relation to Feedback from Trainees the user might be given the options:

- Very negative Feedback – Measurement value 1
- Overall negative feedback – Measurement value 3
- Average feedback – Measurement value 5
- Overall positive feedback – Measurement value 7
- Very positive feedback – Measurement value 10

A further example would be for the Indicator, Enough and qualified staff available

- Qualified staff are not available – Measurement value 1
- Number of available qualified staff is low – Measurement value 3
- Average number of qualified staff available – Measurement value 5
- Number of available qualified staff is high – Measurement value 7
- Highly qualified staff are available – Measurement value 10

And a third example for the Certification Indicator:

- No Certification available – Measurement value 1
- Low value certification available – Measurement value 3
- Average value certification available – Measurement value 5
- Good certification available – Measurement value 7
- High value certification available – Measurement value 10

This approach helps to limit the degree of subjectivity brought by the user to the software program.

To carry this approach forward to the remaining indicators we would suggest that the following questions could be useful in measuring each indicator:

Successful completion of training

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

Success rate of the course

- Objectives not met – Measurement value 1
- Objectives partially met – Measurement value 3
- Objectives half achieved – Measurement value 5
- Objectives substantially met – Measurement value 7
- Objectives fully achieved – Measurement value 10

Attractiveness and relevance of teaching techniques employed

- Very Poor Technique – Measurement value 1
- Poor Technique – Measurement value 3
- Average Technique – Measurement value 5
- Good Technique – Measurement value 7
- Excellent Technique – Measurement value 10

Appropriate duration

- Totally inappropriate Duration – Measurement value 1
- Poor Duration – Measurement value 3
- Acceptable Duration – Measurement value 5
- Very appropriate Duration – Measurement value 7
- Totally appropriate Duration – Measurement value 10

Appropriate learning content

- Inappropriate learning content – Measurement value 1
- Poor learning content – Measurement value 3
- Acceptable learning content – Measurement value 5
- Very good learning content – Measurement value 7
- High Standard Learning content – Measurement value 10

Investment in motivation of participants

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

Innovation

- Not Innovative – Measurement value 1
- Somewhat Innovative – Measurement value 3
- Average degree of Innovation – Measurement value 5
- Very good level of innovation – Measurement value 7
- Highly Innovative – Measurement value 10

Entrance requirement for students / participants

- Entrance requirements not met – Measurement value 1
- Some Entrance requirements met – Measurement value 3
- Half of Entrance requirements met – Measurement value 5
- Entrance requirements substantially met – Measurement value 7
- Entrance requirements totally met – Measurement value 10

Continued course pathway / Progression into further levels

- No progression routes available – Measurement value 1
- Poor progression routes available – Measurement value 3
- Some progression routes available – Measurement value 5
- Good progression routes available – Measurement value 7
- Excellent progression routes available – Measurement value 10

Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)

- No integration of soft and Social skills – Measurement value 1
- Some integration of soft and Social skills – Measurement value 3
- Average integration of soft and Social skills – Measurement value 5
- Good integration of soft and Social skills – Measurement value 7
- Excellent integration of soft and Social skills – Measurement value 10

Recognition of European standards (ECVET, ECTS, EQF,...)

- No recognition of European standards – Measurement value 1
- Some recognition of European standards – Measurement value 3
- Average recognition of European standards – Measurement value 5

- Good recognition of European standards – Measurement value 7
- Excellent recognition of European standards – Measurement value 10

Methodological and pedagogical concept

- No correspondence to learner needs – Measurement value 1
- Some correspondence to learner needs – Measurement value 3
- Average correspondence to learner needs – Measurement value 5
- Good correspondence to learner needs – Measurement value 7
- Excellent correspondence to learner needs – Measurement value 10

Constantly updating programmes (effort to keep updated programmes)

- Not worth the effort involved – Measurement value 1
- Somewhat worth the effort involved – Measurement value 3
- Average return from the effort involved – Measurement value 5
- Good return worth the effort involved – Measurement value 7
- Definitely worth the effort involved – Measurement value 10

Participation rates

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

Feedback by trainees

- Very negative Feedback – Measurement value 1
- Overall negative feedback – Measurement value 3
- Average feedback – Measurement value 5
- Overall positive feedback – Measurement value 7
- Very positive feedback – Measurement value 10

Feedback by employers

- Very negative Feedback – Measurement value 1
- Overall negative feedback – Measurement value 3
- Average feedback – Measurement value 5
- Overall positive feedback – Measurement value 7
- Very positive feedback – Measurement value 10

Evaluation of seminars, feedback, satisfaction within the training programme

- No Satisfaction – Measurement value 1
- Small level of Satisfaction – Measurement value 3

- Average level of Satisfaction – Measurement value 5
- Good level of satisfaction – Measurement value 7
- Totally satisfied – Measurement value 10

Absenteeism figures (= measurement of quality, of course, of choice, of motivation - except absenteeism because of illness, job reasons, etc.)

- Very high level of absenteeism – Measurement value 1
- High level of absenteeism – Measurement value 3
- Average attendance level – Measurement value 5
- Good attendance – Measurement value 7
- Full attendance – Measurement value 10

Percentage of training contents taught

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

Level of knowledge kept after finished VET

- No Retained knowledge – Measurement value 1
- Poor Retained knowledge – Measurement value 3
- Average Retained knowledge – Measurement value 5
- Good Retained knowledge – Measurement value 7
- Excellent Retained knowledge – Measurement value 10

Return on investment for employers

- No Return on investment – Measurement value 1
- Poor Return on investment – Measurement value 3
- Average Return on investment – Measurement value 5
- Good Return on investment – Measurement value 7
- Excellent Return on investment – Measurement value 10

The level of investment in the training of trainers

- Not worth the effort involved – Measurement value 1
- Somewhat worth the effort involved – Measurement value 3
- Average return from the effort involved – Measurement value 5
- Good return worth the effort involved – Measurement value 7
- Definitely worth the effort involved – Measurement value 10

The level of investment in the competences of administrative and general staff members

- Not viable
- Poor viability – Measurement value 3
- Average level of Viability – Measurement value 5
- High Level of Viability – Measurement value 7
- Totally Viable – Measurement value 10

Enough and qualified staff available (trainers, call centre, organisational staff, managers,...)

- Qualified staff are not available – Measurement value 1
- Number of available qualified staff is low – Measurement value 3
- Average number of qualified staff available – Measurement value 5
- Number of available qualified staff is high – Measurement value 7
- Highly qualified staff are available – Measurement value 10

Practical experience of teachers / trainers

- No practical experience – Measurement value 1
- Some practical experience – Measurement value 3
- Average practical experience – Measurement value 5
- Good practical experience – Measurement value 7
- Excellent practical experience – Measurement value 10

Pedagogical competence of trainers

- No Pedagogical competence – Measurement value 1
- Some Pedagogical competence – Measurement value 3
- Average Pedagogical competence – Measurement value 5
- Good Pedagogical competence – Measurement value 7
- Excellent Pedagogical competence – Measurement value 10

Sustainability of the VET offer

- Not sustainable – Measurement value 1
- Some sustainability – Measurement value 3
- Average sustainability – Measurement value 5
- Good sustainability – Measurement value 7
- Highly sustainable – Measurement value 10

The use of acquired skills in the workplace

- Not at all – Measurement value 1
- To a limited degree – Measurement value 3
- To an average degree – Measurement value 5
- To a high degree – Measurement value 7
- Very well – Measurement value 10

Focus on the levels of unemployment in different social groups

- Not at all – Measurement value 1
- To a limited degree – Measurement value 3
- To an average degree – Measurement value 5
- To a high degree – Measurement value 7
- Very well – Measurement value 10

Prevalence of vulnerable groups in the VET system

- Not at all – Measurement value 1
- To a limited degree – Measurement value 3
- To an average degree – Measurement value 5
- To a high degree – Measurement value 7
- Very well – Measurement value 10

Relation between labour market and VET offer

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

Legal obligations

- Not worth the effort involved – Measurement value 1
- Somewhat worth the effort involved – Measurement value 3
- Average return from the effort involved – Measurement value 5
- Good return worth the effort involved – Measurement value 7
- Definitely worth the effort involved – Measurement value 10

Enrolment rate (expected and actual enrolment rate), participants rate

- No candidates enrolled – Measurement value 1
- Poor enrolment rate – Measurement value 3
- Average enrolment rate – Measurement value 5
- Good enrolment rate – Measurement value 7
- High Enrolment rate – Measurement value 10

Market potential

- No market potential – Measurement value 1
- Poor market potential – Measurement value 3
- Average market potential – Measurement value 5
- Good market potential – Measurement value 7

- High Enrolment rate – Measurement value 10

Market share

- No market share – Measurement value 1
- Poor market share – Measurement value 3
- Average market share – Measurement value 5
- Good market share – Measurement value 7
- High Market share – Measurement value 10

Ability to adapt with little effort to target groups, to market needs

- No possibility of adaption – Measurement value 1
- Adaption very difficult – Measurement value 3
- Average effort to adapt – Measurement value 5
- Adaption is not too difficult – Measurement value 7
- Very easy to adapt – Measurement value 10

Flexibility in offering this VET offer (flexibility in time, place, in delivery...)

- No flexibility – Measurement value 1
- Poor flexibility – Measurement value 3
- Average flexibility – Measurement value 5
- Good flexibility – Measurement value 7
- Very high flexibility – Measurement value 10

Anticipation of regional / national / EU / etc. policy and developments

- No correspondence – Measurement value 1
- Poor correspondence – Measurement value 3
- Average correspondence – Measurement value 5
- Good correspondence – Measurement value 7
- Very high correspondence – Measurement value 10

Cost analysis

- No – Measurement value 1
- To a small degree – Measurement value 3
- To an average degree – Measurement value 5
- To a Good degree – Measurement value 7
- Totally – Measurement value 10

Affordable price for participants

- Too expensive – Measurement value 1
- Expensive – Measurement value 3

- Average level of expense – Measurement value 5
- Generally affordable – Measurement value 7
- Totally affordable – Measurement value 10

Infrastructure

Directly related to the percentage result:

- 10% - Measurement value 1
- 50% - Measurement value 5
- 100% - Measurement value 10

The existence of programmes to allow access to VET courses

- No support – Measurement value 1
- Limited support – Measurement value 3
- Average level of support – Measurement value 5
- Good support – Measurement value 7
- Totally funded – Measurement value 10

Sponsorship

- No grant – Measurement value 1
- Limited grant – Measurement value 3
- Average grant – Measurement value 5
- Good grant support – Measurement value 7
- Totally funded – Measurement value 10

Interest of other VET providers

- No interest – Measurement value 1
- Limited interest – Measurement value 3
- Average interest – Measurement value 5
- Good interest – Measurement value 7
- Significant interest – Measurement value 10

External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)

- No interest – Measurement value 1
- Limited interest – Measurement value 3
- Average interest – Measurement value 5
- Good interest – Measurement value 7
- Significant interest – Measurement value 10

Stakeholder opinions (social partners, professional organisations, public bodies, funders...)

- No support – Measurement value 1
- Limited support – Measurement value 3
- Average level of support – Measurement value 5
- Good support – Measurement value 7
- Excellent funded – Measurement value 10

Importance of a course to the VET provider (image)

- No importance – Measurement value 1
- Limited importance – Measurement value 3
- Average level of importance – Measurement value 5
- Important – Measurement value 7
- Very Important – Measurement value 10

Feedback by trainers

- Very negative Feedback – Measurement value 1
- Overall negative feedback – Measurement value 3
- Average feedback – Measurement value 5
- Overall positive feedback – Measurement value 7
- Very positive feedback – Measurement value 10

Feedback by organisational staff

- Staff are unhappy with the course – Measurement value 1
- Staff have many negative feelings towards the course – Measurement value 3
- Staff have an average level of satisfaction with the course – Measurement value 5
- Staff are generally happy with the course – Measurement value 7
- Staff are very happy with the course – Measurement value 10

Certification

- No Certification available – Measurement value 1
- Low value certification available – Measurement value 3
- Average value certification available – Measurement value 5
- Good certification available – Measurement value 7
- High value certification available – Measurement value 10

Conclusion

Substantial work has now been completed on the identification of the Key Success Factors that influence the Product Lifecycle of Vocational Education and Training products. The Indicators involved in the PLM process have been identified and each indicator has been assigned to the Key Success Factors that it influences. A weighting system has been established to allow institutes using the PLM software to state the importance of each indicator to them and to remove an indicator entirely by assigning it a weighting value of Zero. A system of measuring the success of each indicator on a 1 to 10 scale has also been established.

Each Indicator has also been assigned to the phase of the Product Lifecycle that it influences and while the overall purpose of the PLM software is to examine the VET product over its whole lifecycle there is merit in the idea of being able to run the software on a specific phase of the Lifecycle.

As with any program the output produced will only be as good as the accuracy of the data supplied by the user. To avoid subjectivity in using the weighting and measurement system it is proposed to create multiple text choices for each indicator so that the user will select from this preset list and the appropriate point on the scale will then be assigned to the indicator by the software.

The weighting of Key Success factors will also be calculated by the software based on the weight assigned by the user to each Indicator that influences the individual KSF.

While the wording used for the individual Key Success Factors and Indicators seems clear there will be a need to review this at the software beta version test phase and if necessary rewording to provide greater clarity can be undertaken at this stage.

Appendix 1

Indicators, Key Success Factors and Measurement



no. of KSF / Indicator	Indicator description by order of KSF	Explanation for measurement	Measurement	Provided by	Relevant to KSF	Signif. of Product			
						1	2	3	4
KSF1 Quality of VET Training									
3	Successful completion of training	What percentage of trainees have reached the training goals / competences? Graded scale 1-10 (where 10 is 100%)	0= no relevance / Graded scale 1-10	EQARF	1, 10				X
15	Success rate of the course	On which level has the course achieved its defined objectives? Graded scale 1-10 (10: all objectives fully met; 1: failure to achieve objectives)	0= no relevance / Graded scale 1-10	Group Schwin	1, 10				X
16	Attractiveness and relevance of teaching techniques employed	How attractive is the teaching technique employed (based on students' / participants feedback)? Graded scale 1-10 (10: very good technique; 1: poor technique)	0= no relevance / Graded scale 1-10	Group Schwin	1	X	X	X	
20	Appropriate duration	How appropriate is the duration of the training programme (concerning content, learning effort, market, amount of time required by the students, competitiveness to other VET providers)? Graded scale 1-10 (10: perfect; 1: bad)	0= no relevance / Graded scale 1-10	PP1	1	X	X	X	
21	Appropriate learning content	How appropriate is the learning content (concerning the student's needs, market needs, employees needs, balance between theoretical and practical training, innovative and informative value for students...) Graded scale 1-10 (10: perfect; 1: bad)	0= no relevance / Graded scale 1-10	PP1	1	X	X	X	
24	Investment in motivation of participants	Do we (still) have to invest in (future) target groups? If yes: are we able to do so and do we want to invest in target groups? Graded scale 1-10 (10: 100% affordability; 1: 0% affordability, investment to high)	0= no relevance / Graded scale 1-10	Group Schwin	1	X			
28	Innovation	How innovative is the VET product (level of innovation)? Graded scale 1-10 (10: very innovative; 1: not innovative)	0= no relevance / Graded scale 1-10	PP1	1, 4, 8	X	X	X	
34	Intrance requirement for students / participants	Fulfillment of entry requirements of the course? Graded scale 1-10 (10: fully fulfilled; 1: no level of correspondence)	0= no relevance / Graded scale 1-10	PP1	1	X	X	X	
35	Continued course pathway / Progression into further levels	Is it possible to progress into further educational and/or course levels within the provided training programme? Graded scale 1-10 (10: proceed future levels; 1: no progression at all possible)	0= no relevance / Graded scale 1-10	PP1	1	X			
38	Inclusion of transversal competence in the training (soft and social skills, team work, presentation techniques, time management...)	Does the training programme also focus on general soft and social skills and competences (team work, soft skills, presentation techniques, time management...)? Graded scale 1-10 (10: high level of integrated soft and social skills; 1: no soft and social skills integrated)	0= no relevance / Graded scale 1-10	AW-GC-15	1	X	X	X	
49	Recognition of European standards (ECVET, ECTS, EQF...)	Does the training programme recognise European standards like the ECVET or ECTS system, the EQF, etc.? If yes: how important is the European standardisation for this product? Graded scale 1-10 (10: high level of recognition of European standards; 1: no recognition of European standards)	0= no relevance / Graded scale 1-10		1, 10	X	X		
48	Methodological and pedagogical concept	How appropriate are the methodological and pedagogical concepts corresponding to the learners' needs? Graded scale 1-10 (10: high level of correspondence; 1: no correspondence)	0= no relevance / Graded scale 1-10		1, 2, 9	X	X	X	
47	Constantly updating programmes (effort to keep updated programmes)	Do we have to update this VET offer regularly and is it worth the effort? Graded scale 1-10 (10: it is absolutely worth the effort; 1: no, it's not worth the effort)	0= no relevance / Graded scale 1-10	PP1	1, 4	X	X		
KSF2 Customer Satisfaction									
3	Participation rates	Is there a sufficient number of participants? Number of required persons vs. actual participants as a percentage. Graded scale 1-10 (where 10 is 100%)	0= no relevance / Graded scale 1-10	EQARF	2	X	X	X	
12	Feedback by trainees	Has trainee feedback been positive? Graded scale 1-10 (10: Trainees are totally satisfied with the course; 1: Trainees are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	2, 9			X	
14	Feedback by employers	Has employer feedback been positive? Graded scale 1-10 (10: Employers are totally satisfied with the course; 1: Employers are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	2, 9			X	
30	Evaluation of seminars, feedback, satisfaction within the training programme	What is the level of satisfaction within the VET programme? Graded scale 1-10 (10: very high satisfaction; 1: no satisfaction)	0= no relevance / Graded scale 1-10	PP1	2	X	X		
36	Absenteeism figures (= measurement of quality, of course, of choice of motivation... except absenteeism because of illness, job reasons, etc.)	Percentage rate of absenteeism during the course? Graded scale 1-10 (10: very low level of absenteeism; 1: very high level of absenteeism)	0= no relevance / Graded scale 1-10	PP1	2	X	X		
37	Percentage of training contents taught	Is the percentage rate of training contents taught on schedule? Graded scale 1-10 (10: totally on schedule; 1: significantly behind schedule)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
43	Level of knowledge kept after finished VET	What's about the level of knowledge kept after the finished VET (evaluation, feedback of customer/company/trainee)? Graded scale 1-10 (10: high level of knowledge; 1: no kept knowledge)	0= no relevance / Graded scale 1-10	PP1	2	X	X		
48	Methodological and pedagogical concept	How appropriate are the methodological and pedagogical concepts corresponding to the learners' needs? Graded scale 1-10 (10: high level of correspondence; 1: no correspondence)	0= no relevance / Graded scale 1-10		1, 2, 9	X	X	X	
46	Return on investment for employers	Return on investment reports, feedback, evaluation in companies. Graded scale 1-10 (10: very high return; 1: no return)	0= no relevance / Graded scale 1-10		2	X	X		
KSF3 Quality of the Staff									
1	The level of investment in the training of trainers	Do you have to invest in the training of trainers and how important is the investment by taking into account the cost and time involved? Graded scale 1-10 (10: it is worth the effort; 1: it is absolutely not worth the effort)	0= no relevance / Graded scale 1-10	EQARF	3	X	X		
10	The level of investment in the competences of administrative and general staff members	Is there an administrative staff cost / requirement associated with this project. How viable is this from a cost / staffing perspective? Graded scale 1-10 (10: high quality; 1: no quality)	0= no relevance / Graded scale 1-10	Group Schwin	3	X	X		
29	Enough and qualified staff available (trainers, call centre, organisational staff, managers...)	Is there enough and qualified staff available? Graded scale 1-10 (10: enough qualified staff; 1: no (more) staff)	0= no relevance / Graded scale 1-10	PP1	3	X	X		
33	Practical experience of teachers / trainers	On which level is the teachers'/trainers' requested practical experience? Graded scale 1-10 (10: very high practical experience; 1: no practical experience)	0= no relevance / Graded scale 1-10	PP1	3	X	X		
39	Pedagogical competence of trainers	Pedagogical competences are proved by relevant experience, formal tests, by evaluation, by participants' feedbacks. Graded scale 1-10 (10: high level of pedagogical competence; 1: very low level of pedagogical competence)	0= no relevance / Graded scale 1-10	PP1	3	X	X		
KSF4 Responding to Market Demands									
4	Sustainability of the VET offer	What is the level of the sustainability of the VET product? (e.g. destination of trainees six months after completing their training. Have trainees achieved employment as a result of their training or have they progressed to a higher level of training?) Graded scale 1-10 (10: highest sustainability; 1: no sustainability)	0= no relevance / Graded scale 1-10	EQARF	4	X	X		
5	The use of acquired skills in the workplace	Are people able to use the acquired skills in the workplace? Graded scale 1-10 (10: very well; 1: not at all)	0= no relevance / Graded scale 1-10	EQARF	4	X	X		
6	Focus on the levels of unemployment in different social groups	Does this course fulfil the specific needs to train unemployed people from different social groups? Graded scale 1-10 (10: very well; 1: not at all)	0= no relevance / Graded scale 1-10	EQARF	4	X	X		
7	Prevalence of vulnerable groups in the VET system	Does the course fulfil the needs of specific vulnerable groups (e.g. disadvantaged groups, migrants, lone parents, etc.)? Is this a factor in running the course? Graded scale 1-10 (10: very well; 1: not at all)	0= no relevance / Graded scale 1-10	EQARF	4	X	X		
8	Relation between labour market and VET offer	Has the need of this product been related to the labour market needs? Graded scale 1-10 (where 10 is 100%)	0= no relevance / Graded scale 1-10	EQARF	4	X	X		
19	Legal obligations	Do we have to refer to any legal obligations? Do we have to adapt the seminar regularly to legal obligations? Is it worth the effort? Graded scale 1-10 (10: it is worth the effort; 1: it is absolutely not worth the effort)	0= no relevance / Graded scale 1-10	PP1	4	X	X	X	
25	Enrolment rate (expected and actual enrolment rate), participants rate	Do we have enough participants? Graded scale 1-10 (10: very high enrolment rate; 1: very low enrolment rate)	0= no relevance / Graded scale 1-10	Group Schwin	4	X	X	X	
26	Market potential	Level of market potential for the VET product Graded scale 1-10 (10: high; 1: very low to zero)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
30	Market share	Level of market share for the VET product. Graded scale 1-10 (10: high; 1: very low to zero)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
31	Ability to adapt with little effort to target groups, to market needs	Are we able to adapt the VET offer to other target groups, to market needs, to companies' needs? Graded scale 1-10 (10: very high and easy adaptability; 1: no possibility of adaptation)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
32	Flexibility in offering this VET offer (flexibility in time, place, in delivery...)	Are we able to offer this VET offer flexibly in place and time? Graded scale 1-10 (10: very high flexibility; 1: no flexibility)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
44	Anticipation of regional / national / EU / etc. policy and developments	Does the VET offer/product correspond to international or national, regional laws and regulations? Graded scale 1-10 (10: high level of correspondence; 1: no level of correspondence)	0= no relevance / Graded scale 1-10	PP1	4	X	X		
47	Constantly updating programmes (effort to keep updated programmes)	Do we have to update this VET offer regularly and is it worth the effort? Graded scale 1-10 (10: it is absolutely worth the effort; 1: no, it's not worth the effort)	0= no relevance / Graded scale 1-10	PP1	1, 4	X	X		
28	Innovation	How innovative is the VET product (level of innovation)? Graded scale 1-10 (10: very innovative; 1: not innovative)	0= no relevance / Graded scale 1-10	PP1	1, 4, 8	X	X	X	
KSF5 Cost Control									
18	Cost analysis	Do incomes cover costs? Graded scale 1-10 (10: yes, totally; 1: no, not at all)	0= no relevance / Graded scale 1-10	Group Schwin	5	X	X	X	
45	Affordable price for participants	Is the price affordable for participants? Graded scale 1-10 (10: affordable fee; 1: too expensive)	0= no relevance / Graded scale 1-10	PP1	5	X	X	X	
KSF6 Suitability of Infrastructure and Material									
17	Infrastructure	Do we have the appropriate infrastructure to offer the training programme? If no: are we able to and do we want to invest in the appropriate infrastructure? Graded scale 1-10 (10: 100% affordability; 1: 0% affordability (investment to high)	0= no relevance / Graded scale 1-10	Group Schwin	6	X			
KSF7 Stakeholder Engagement									
9	The existence of programmes to allow access to VET courses	Is there a programme available to support this VET course? (e.g. local, regional, national, European, governmental programmes and key aspects to support and allow VET courses. Graded scale 1-10 (10: high support; 1: no support)	0= no relevance / Graded scale 1-10	EQARF	7	X	X		
27	Sponsorship	Available sponsorship / fundings, and do we need them? Graded scale 1-10 (10: yes, high grant; 1: no grant)	0= no relevance / Graded scale 1-10	PP1	7	X	X		
40	Interest of other VET providers	Are other VET providers interested in running this course on our behalf or through a learning arrangement? Graded scale 1-10 (10: significant interest; 1: no interest)	0= no relevance / Graded scale 1-10	PP1	7	X	X		
41	External interest by media, partners, stakeholders, media attention (articles in media during the course, etc.)	Does the course attract attention by media, stakeholders confirmed their interest in a course; partners how formal interest in a course Graded scale 1-10 (10: very high interest; 1: no stakeholder interest)	0= no relevance / Graded scale 1-10	PP1	7	X	X		
42	Stakeholder opinions (social partners, professional organisations, public bodies, funders...)	Stakeholders invest in the course Graded scale 1-10 (10: very high level of support; 1: no support)	0= no relevance / Graded scale 1-10	Koppitz, FI	7	X	X		
KSF8 Strategic Provider Benefits									
23	Importance of a course to the VET provider (image)	Relevance of the training programme in the portfolio of the VET provider (image)? Graded scale 1-10 (10: high image; 1: low image)	0= no relevance / Graded scale 1-10	Group Schwin	8	X	X		
28	Innovation	How innovative is the VET product (level of innovation)? Graded scale 1-10 (10: very innovative; 1: not innovative)	0= no relevance / Graded scale 1-10	PP1	1, 4, 8	X	X	X	
KSF9 Evaluation Mechanisms									
11	Feedback by trainees	Has trainee feedback been positive? Graded scale 1-10 (10: Trainees are totally satisfied with the course; 1: Trainees are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	9			X	
12	Feedback by trainees	Has trainee feedback been positive? Graded scale 1-10 (10: Trainees are totally satisfied with the course; 1: Trainees are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	2, 9			X	
13	Feedback by organisational staff	Has organisational staff feedback been positive? Graded scale 1-10 (10: Staff are totally satisfied with the course; 1: Staff are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	9			X	
14	Methodological and pedagogical concept	How appropriate are the methodological and pedagogical concepts corresponding to the learners' needs? Graded scale 1-10 (10: high level of correspondence; 1: no correspondence)	0= no relevance / Graded scale 1-10		1, 2, 9	X	X	X	
18	Feedback by employers	Has employer feedback been positive? Graded scale 1-10 (10: Employers are totally satisfied with the course; 1: Employers are totally unsatisfied with the course)	0= no relevance / Graded scale 1-10	Group Schwin	2, 9			X	
KSF10 Appropriate Certification									
3	Successful completion of training	What percentage of trainees have reached the training goals / competences? Graded scale 1-10 (where 10 is 100%)	0= no relevance / Graded scale 1-10	EQARF	1, 10			X	
15	Success rate of the course	Has the course achieved its objectives (success rate)? Graded scale 1-10 (10: all objectives fully met; 1: Total failure to achieve objectives)	0= no relevance / Graded scale 1-10	Group Schwin	1, 10	X	X		
22	Certification	Do we have the appropriate certification and what is its value (for the participants, for the labour market and/or is the certification officially recognised by the state)? Graded scale 1-10 (10: perfect certification; 1: no/certification)	0= no relevance / Graded scale 1-10	PP1	10	X	X	X	
49	Recognition of European standards (ECVET, ECTS, EQF...), inclusion of VET system adapted?	Does the training programme recognise European standards like the ECVET or ECTS systems, the EQF, etc.? If yes: how important is the European standardisation? Graded scale 1-10 (10: high level of recognition of European standards; 1: no recognition of European standards)	0= no relevance / Graded scale 1-10		1, 10	X	X		