

State Secretariat for Education, Research and Innovation SERI

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# Pilot Project Swiss VET Initiative India: Cooperation between Switzerland and India in the field of Vocational Education and Training 2009-2013; Evaluation

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Final Report  
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## Executive Summary

### *The Swiss VET Initiative India and its Pilot Project*

The «Swiss Vocational Education and Training Initiative India» (SVETII, «Initiative») was launched at the occasion of the 60<sup>th</sup> anniversary of the independence of India. The Initiative is based on the Swiss-Indian bilateral friendship treaty, signed by the two countries on August 14, 1948. The Initiative reflects a specific demand of Swiss companies based in India for qualified workers as well as Switzerland's interest in positioning its vocational education and training (VET) system internationally. In this perspective, the Initiative aims at transferring elements of systemic relevance to the Swiss vocational education and training system to India.

The SVETII Pilot Project started in 2008 as a public-private partnership initiated by the Swiss-Indian Chamber of Commerce (SICC) and including various VET partners, such as the Swiss Engineering, Electrical and Metalworking Industry Association (Swissmem), the Swiss Federal Institute for Vocational Education and Training (SFIVET), the Federal Office for Professional Education and Technology (OPET) and four Swiss companies in India. The main goal of the Pilot Project was to proof whether a transfer of systemic elements of the Swiss VET system to India is possible («proof of concept»). Consequently, the Pilot Project was guided by three sets of benchmarks:

Targets for the Pilot Project	Systemic elements to be transferred	Objectives of the Initiative
Locations, partner companies	Strong corporate responsibility for VET	Promoting Swiss VET system abroad
Industrial Training Institutes	Combining theory and practice in a dual approach	Increasing the competitiveness of Swiss companies in India
Instructors, teachers, examiners	Competence-oriented teaching	Supporting Indian future professionals
SVETII trainees, programmes	VET partnership	Contributing to bilateral relations

### *Objectives of the Evaluation*

The evaluation focusses on the Pilot Project of the Initiative, i.e. on the measures taken between 2009 and spring 2013. The evaluation assesses the elements that were transferred from the Swiss VET system to the Indian context and identifies success factors of and challenges to this «systemic transfer». Hence, the objectives of the evaluation were defined as follows:

- Assessment of the results of the Pilot Project
- Assessment of the sustainability of the Initiative
- Identification of critical factors impacting a transfer of systemic elements
- Recommendations regarding «Lessons Learnt» in view of further transfers

The evaluation was based on the analysis of documents and statistics as well as on personal interviews conducted in Switzerland and in India. Both methods complemented each other.

### *Achievements of the Pilot Project regarding Specific Targets*

The achievements of the SVETII Pilot Project regarding the quantitative targets included in the funding requests can be assessed as follows:

- *Locations*: 5 locations are currently included in the Initiative: Bangalore (Karnataka), Pune and Chandrapur (Maharashtra), Anand and Vadodara (Gujarat). This is one location more than planned.
- *Partner companies*: The objective set for 2010-11, namely to expand the Pilot Project to 40 partner companies has not been met. The request for 2012-13 reduced the number to 10 (Swiss) companies and 1-3 other companies. These targets have almost been met (8 Swiss, 1 German, 1 Indo-American).
- *Industrial Training Institutes*: The number of ITIs involved has been outreached by the Pilot Project since 17 ITI are involved compared to the 4-9 foreseen.
- *Teachers, instructors, examiners*: Teachers, instructors and examiners were recruited and trained according to the need of the programmes offered.
- *SVETII trainees, programmes*: The quantitative objectives set regarding the numbers of SVETII trainees have not been achieved yet. In addition to the 2-years MSPT programme one company offers a 1-year programme. Moreover, specialised 1-year programmes (welding, electrical, machinist) have been introduced.

The quantitative targets regarding partner companies and SVETII trainees have not been met; the other targets have been met or outreached.

### *Achievements regarding the Transfer of Systemic Elements of the Swiss VET System*

The Initiative followed the principle of transferring knowhow and responsibilities to the fullest extent possible from Swiss VET partners to partners in India. Hence, the Initiative was established as a public-private partnership with separate project organisations in India and in Switzerland. The organisational set-up reflected the needs of the Pilot Project and offered «quick wins». According to Swiss VET tradition, the Initiative is based on a strong responsibility of local companies for the training of their employees and the training is based on a competence-based approach of training and combines both practical training of employees «on the job» and theoretical instructions in the classroom (dual approach). However, the Pilot Project has not yet been able to develop formal and sustainable ties among the VET partners including training institutes, trade-organisations, and authorities in India. SkillSonics as a private company assumes the function of bridging the gap between partners and delivers many services provided in Switzerland by the Cantons.

The Pilot Project was able to prove that a transfer of systemic elements of the Swiss VET system to (Swiss) companies based in India is possible and that the dual approach of Swiss vocational education and training is also suitable in this context. Thus, the «proof of concept» was successful within a well-defined framework.

### *Achievements regarding the Objectives of the Initiative*

The achievements of the SVETII Pilot Project regarding the general objectives of the Initiative can be summarised as follows:

- *Promoting the Swiss VET system abroad:* The Initiative reflects all three priorities set by Switzerland's international strategy for education, research and innovation. The Initiative promoted Swiss quality as well as the reputation of Switzerland as reliable partner in vocational education and training in India.
- *Increasing the competitiveness of Swiss companies in India:* Partner companies benefitted from the trainings provided by the Pilot Project. They expressed a clear support for the Initiative and welcomed the enhanced quality of SVETII diploma holders. Yet, a critical mass of highly skilled SVETII diploma holders working on the shop floor and also as supervisors will be needed to change working cultures and thus to increase the quality of the output and to strengthen the productivity and competitiveness of companies involved.
- *Supporting Indian future professionals:* SVETII trainees strongly benefitted from the training offered by the Pilot Project. Their technical as well as their soft skills were strengthened and their professional perspectives improved. However, up to now, this positive impact has been limited to a small number of Indian future professionals. Moreover, the missing recognition of the SVETII diploma has to be mentioned as a problem. Governmental recognition of a diploma is needed to continue education within the Indian public education system and is also a precondition for diploma holders to join public service.
- *Contributing to bilateral relations:* The Initiative is based on the Swiss-Indian bilateral friendship agreement. Even though the SVEII is relatively small it contributes positively to bilateral relations between Switzerland and India.

The Initiative has the potential to achieve the objectives set – provided that the quality of the offer can be sustained.

### *Sustainability of the Initiative*

In addition to the benchmarks discussed in the previous chapter, the Initiative should be sustainable in the long run through a self-supporting public-private business model. Thus, the Initiative will depend on a strong interest and commitment of companies along with the support of public authorities. The following aspects concerning the embedment will be important for the Initiative in order to become sustainable:

- Assuring the quality of the Initiative and the overall SVETII approach
- Achieving a strong and enduring involvement of the private sector
- Sustaining the involvement of public authorities and ITIs
- Building up a robust VET partnership

Having proven that the Swiss VET approach suits Swiss companies also in the Indian context, working on the embedment of the Initiative within the VET system of India will now be decisive in order to achieve sustainability.

### *Recommendations Addressing Specific Issues and Stakeholders*

Based on a thorough SWOT-analysis<sup>1</sup> of the Initiative the following recommendations addressing specific issues and stakeholders of the Initiative can be offered.

<b>Stakeholders</b>	<b>Recommendations addressing specific issues and stakeholders</b>
Companies	<ul style="list-style-type: none"> <li>– Ensure the quality of the training infrastructure</li> <li>– Select/ Appoint instructors having the potential and competences required</li> <li>– Allow instructors and training managers to invest enough time in their new responsibilities</li> <li>– Select students meeting the requirements for the SVETII programme</li> <li>– Convince parents and potential SVETII trainees of the added value of the training</li> <li>– Support SVETII trainees to also apply for the Indian apprenticeship certificate</li> <li>– Provide SVETII diploma holders with a working environment allowing them to apply their skills</li> </ul>
SkillSonics	<ul style="list-style-type: none"> <li>– Assure an efficient management and coordination of the Initiative in India and in Switzerland</li> <li>– Assure the quality of the Initiative by implementing an overall quality management system</li> <li>– Strengthen the training of teachers and instructors (refresher courses)</li> <li>– Make the technical English in the training material easier to understand</li> <li>– Further development of the training material</li> <li>– Ensure continuing adaptation of the curriculum to the needs of the industrial sector rather than of particular interests of specific companies</li> <li>– Ensure cooperation with ITIs and availability of suitable theory teachers</li> <li>– Work towards better embedment of the Initiative in the educational system of India</li> <li>– Strengthen the visibility of the Initiative</li> </ul>
SFIVET	<ul style="list-style-type: none"> <li>– Assure the standards set by the Swiss VET system especially with regards to the pedagogic training of mastertrainers, instructors, teachers, and examiners</li> <li>– Develop competence profiles for SVETII mastertrainers, teachers, and instructors regarding subject related capabilities in terms of method and pedagogy</li> </ul>
Swissmem	<ul style="list-style-type: none"> <li>– Assure the standards set by the Swiss VET system especially with regards to the curriculum and the technical training of mastertrainers, instructors, teachers and examiners, and regarding competency profiles and certification</li> </ul>
SERI <sup>2</sup>	<ul style="list-style-type: none"> <li>– Work towards a full implementation of a sustainable VET partnership</li> <li>– Investigations and discussions regarding a «Swiss label» for vocational education and training</li> </ul>

<sup>1</sup> SWOT = **S**trengths / **W**eaknesses / **O**pportunities / **T**hreats

<sup>2</sup> SERI = State Secretariat for Education, Research and Innovation; subsequent office of the former Federal Office for Professional Education and Technology (OPET)



### *Lessons Learnt Regarding the Transfer of Systemic Elements of the Swiss VET System*

According to the evaluation of the Pilot Project, the following lessons can be learned regarding a further promotion of the Swiss VET system abroad.

1. Every initiative aiming at transferring elements of systemic relevance to the Swiss VET system to another country will have to be redesigned regarding its objectives, concept and implementation strategy.
2. A clear demand expressed by potential partner companies as well as by public authorities in the country of destination will be pivotal.
3. The requirements regarding the sustainability of such an initiative will have to be clearly defined.
4. A systemic approach combining the elements identified as being of key relevance for the Swiss VET system and adapting their implementation to the specific context is the promising way for a transfer of systemic elements of the Swiss VET system to other countries.
5. A professional management by a strong local partner is a precondition for successfully implementing such an initiative.
6. A robust organisation set-up is decisive in view of a sustainable development of such an initiative.
7. Particular attention has to be paid to language skills.



# 1 Introducing the Evaluation

## 1.1 The Initiative in a Nutshell

The Swiss Vocational Education and Training Initiative India (SVETII, «Initiative») was launched at the occasion of the 60<sup>th</sup> anniversary of the independence of India. It is based on the Swiss-Indian bilateral friendship treaty, signed by the two countries on August 14, 1948. At the same time the Initiative reflects the demand of Swiss companies in India for qualified workers as well as Switzerland's interest in positioning its vocational education and training (VET) system internationally. The SVETII Pilot Project started in 2008 as a public-private partnership initiated by the Swiss-Indian Chamber of Commerce (SICC) and including various VET partners, such as the Swiss Engineering, Electrical and Metalworking Industry Association (Swissmem), the Swiss Federal Institute for Vocational Education and Training (SFIVET), the Federal Office for Professional Education and Technology (OPET) and four Swiss companies in India. The Initiative aims at transferring systemic elements of the Swiss vocational education and training system to India. The objectives of the Initiative have been specified as follows:

- Promoting the Swiss VET system abroad
- Increasing the competitiveness of Swiss companies in India
- Supporting Indian future professionals
- Contributing to bilateral relations

According to the report on Swiss foreign affairs (2009)<sup>3</sup>, India is one of Switzerland's focus countries. This was confirmed by the Swiss Strategy for education, research, and innovation underlining India's development potential with regards to science and technology.<sup>4</sup> As a member of the so called «BRICS countries»<sup>5</sup> with a newly advanced economic development, India is not perceived as being a developing country anymore. Hence, the Initiative does not follow a development aid approach but has to be seen as contributing to Switzerland's innovation policies.

## 1.2 The Indian Context of the Initiative

With its growing population and in view of its newly advanced economy, India is facing the challenge to assure education and training for 500 million young people until 2025. Whereas India already meets global standards with regards to research and higher education, particular attention will have to be given to vocational education and training in order to strengthen the productivity and competitiveness of the Indian industry. The table below gives some key information regarding the Indian context of the Initiative.

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<sup>3</sup> Schweizerischer Bundesrat (02.09.2009)

<sup>4</sup> Schweizerischer Bundesrat (2010)

<sup>5</sup> Brazil, Russia, India, China, and South Africa are deemed to be at a similar stage of a newly advanced economic development.

Topics	Data	
<b>Demographic development</b>		
Population 2012	1.24 billion	
Life expectancy 2011	Men: 64 years	Women: 68 years
Average age (median)	2010: 25 years	Expected 2020: 29 years
Average annual growth rate of population 2003-2012	1.45%	
Gender distribution 2011	51.5% male, 48.5% female	
Density of population 2011	375 per km <sup>2</sup>	
Rural population rate 2011	68.8%	
Literacy rate 2011	74.0% (urban: 85.0%, rural: 68.9%)	
<b>Economic development</b>		
Total labour force 2012	487 million	
GDP 2012	1.84 trillion US\$	
Average annual growth rate 2003-2012	7.60%	
GNI per capita 2012	1.49 US\$	
GPD per capita 2012	3.85 US\$	
Share of Agriculture (1st sector)	Share of GDP 2012: 17.4%	Share of labour force 2011: 53%
Share of Industry (2nd sector)	Share of GDP 2012: 26.1%	Share of labour force 2011: 19%
Share of Services (3rd sector)	Share of GDP 2012: 56.5%	Share of labour force 2011: 28%
Unemployment rate 2012	8.5%	
Poverty headcount % at national poverty line 2010	29.8% of population	

Table 1: Key information regarding the Indian context of the Initiative (various sources<sup>6</sup>)

### 1.3 Objectives of the Evaluation

In mandating an evaluation of the SVETII, the State Secretariat for Education, Research and Innovation (SERI) complied with art. 66 of the Federal Vocational and Professional Education and Training Ordinance asking for an assessment of the efficacy of projects and measures financed by public contributions. The objectives of the evaluation were defined by the SERI as follows:

- *Assessment of the results of the Pilot Project:* The evaluation shall assess to what extent the objectives of the pilot phase of the Initiative have been achieved.
- *Assessment of the sustainability of the Initiative:* Moreover, the sustainability of the Initiative shall be assessed.
- *Critical factors impacting a «systemic transfer»:* The evaluation shall provide evidence regarding critical factors impacting a transfer of systemic elements of the Swiss VET system to other countries, in this case to India.
- *Recommendations regarding «lessons learnt»:* Based on the results of the evaluation, recommendations regarding success factors of a transfer of systemic elements of the Swiss VET system will be formulated.

<sup>6</sup> <http://www.bbc.co.uk/news/world-south-asia-12557386> / <http://en.wikipedia.org/wiki/India> / <https://www.cia.gov/library/publications/the-world-factbook/geos/in.html> (downloads 16.09.2013)

The following aspects of the Initiative were explicitly excluded from the evaluation:

- *Competences*: The evaluation did not include a testing of skills acquired by the trainees, instructors or teachers. However, appreciations by key actors regarding the increase in competence compensate for this.
- *Educational material*: The evaluation did not assess the quality of the educational material created for this training programme from a didactic or pedagogic point of view nor were we able to assess the accuracy of content presented in the educational material.
- *Sustainability of the Initiative*: Since the Initiative is now run as a private business; the evaluation team only got limited insight into future project finances. In addition, the Initiative is at an early stage regarding the involvement of a larger number of partner companies. Therefore, the assessment of the Initiative's sustainability is based on information regarding future commitments given by project partners.
- *Swiss labour market*: At the outset of the Initiative, some stakeholders in Switzerland expressed concerns regarding a potential negative influence of the Initiative on the labour market in Switzerland. However, this question was not included in the mandate for this evaluation since this would have entailed economic models taking into account activities of Swiss companies in India, the degree to which Switzerland and India compete for jobs, effects of vocational training on choices of industrial locations, as well as an overall assessment of economic developments in Switzerland and India.

The evaluation focusses on the Pilot Project (including pilot phase and pilot closure) of the Initiative, i.e. on the measures taken between 2009 and spring 2013. The evaluation identifies and assesses the elements that were transferred from the Swiss VET system to the Indian context as well on success factors and challenges to this systemic transfer. In addition, the evaluation addresses facets of the overall approach of the Initiative. Yet, the report clearly distinguishes assessments regarding activities and achievements of the Pilot Project and comments regarding the overall approach of the Initiative.

The evaluation started in November 2012 and was completed in November 2013; the numbers according to the internal final report were added in April 2014. Details on the particular steps and milestones of the evaluation can be found in annexe A-2.

#### **1.4 Impact Model and Evaluation Themes**

The evaluation was based on an impact model distinguishing measures, outputs, impacts and finally outcomes of the Initiative – as shown in the following two figures.

### Impact Model for Pilot Project: Overview

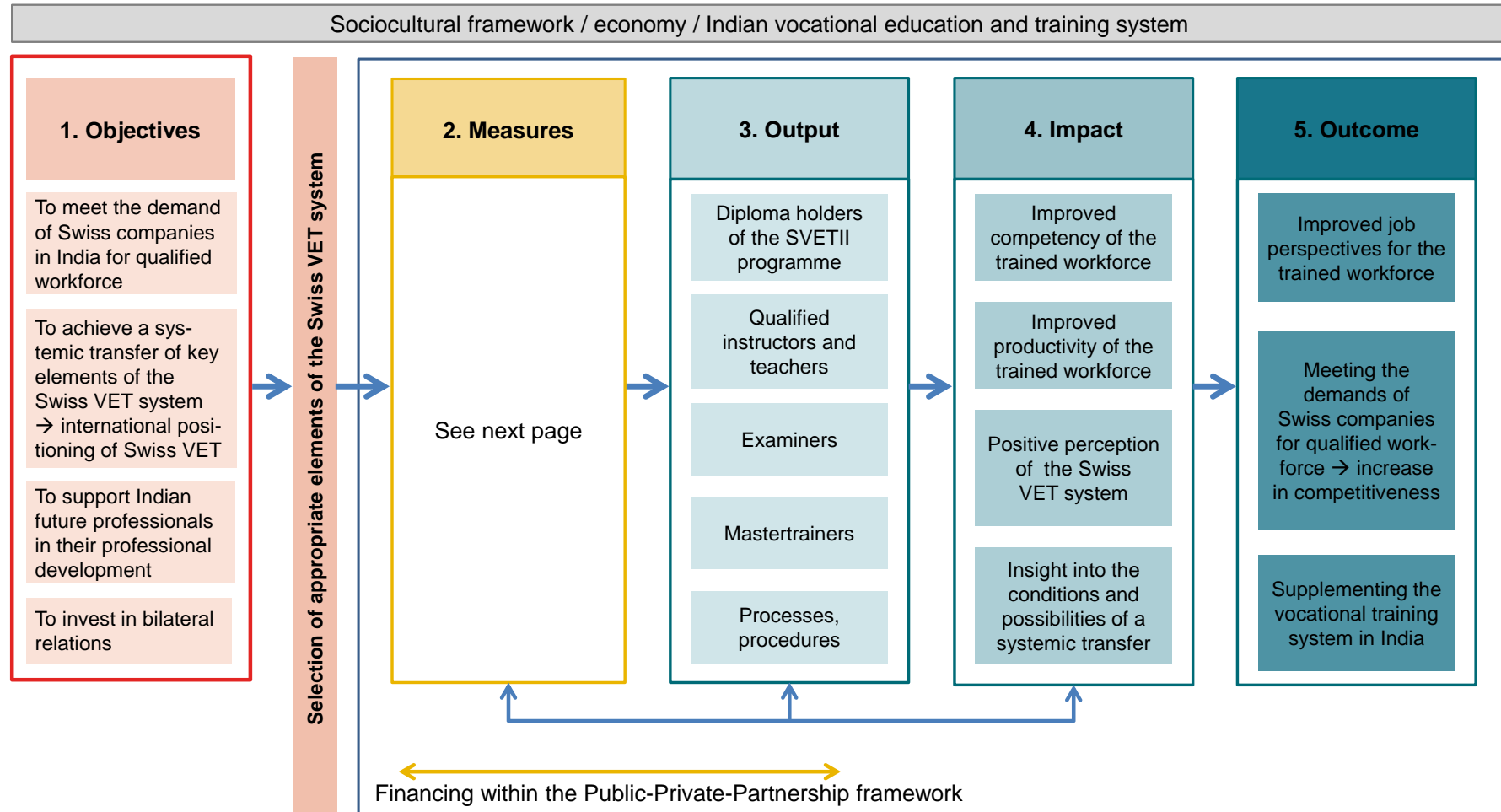
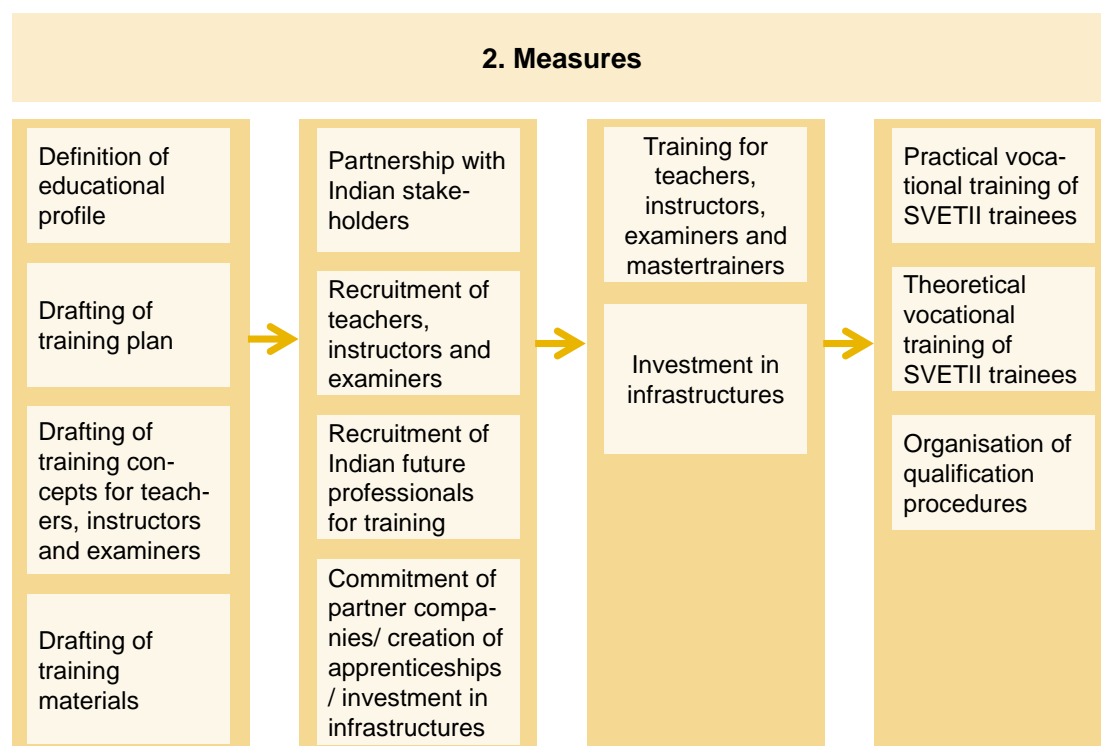


Figure 1: Impact Model: Overview

## Impact Model for SVETII Pilot Project: Measures



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Figure 2: Impact Model: Measures

The evaluation themes were defined based on the impact model presented above; they are summarised in the next table. The detailed evaluation questions are presented in annexe A-1, along with the research methods applied to answer them.

Evaluation themes	
<b>1. Analysis of the objectives of the Initiative and of the concept of the SVETII Pilot Project</b>	
1.1	Objectives of the Initiative
1.2	Concept of the Pilot Project
<b>2. Analysis of the implementation of the SVETII Pilot Project</b>	
2.1	General implementation
2.2	Recruitment procedures and profiles recruited
2.3	Project organisation, partners and procedures
2.4	Costs and financial resources
2.5	Quality assurance measures
<b>3. Analysis of the outputs of the SVETII Pilot Project</b>	
3.1	Methods, training documents and infrastructures provided in the framework of the Pilot Project
3.2	Teachers, instructors, examiners and mastertrainers involved in the Pilot Project
3.3	SVETII trainees and diploma holders involved in the Pilot Project
<b>4. Analysis of the impacts of the SVETII Pilot Project</b>	
4.1	Competences and professional perspectives acquired
4.2	Perception and acceptance
4.3	New experience made by Swiss partners

Evaluation themes	
<b>5. Analysis of the outcomes of the SVETII Pilot Project</b>	
5.1	Sustainability of the Initiative
5.2	Effects of the Pilot Project in India
5.3	Effects of the Pilot Project in Switzerland
<b>6. Synthesis</b>	
6.1	Achievement of objectives within the Pilot Project
6.2	Lessons learnt and systemic transfer to other countries

Table 2: Evaluation themes

## 1.5 Research Methods of the Evaluation

According to the «Detailed Evaluation Concept»<sup>7</sup> the evaluation was based on the analysis of documents and statistics as well as on personal interviews conducted in Switzerland as well as in India. Both methods are important for information collection in social sciences and complement each other.

### *Analysis of documents*

The systematic analysis of documents focusses on information needed to answer the evaluation questions. The project partners provided a detailed documentation of the Initiative including the initial feasibility study; requests for funding, project reports, and a number of additional documents (see Reference List).

### *Personal Interviews*

Personal interviews allow to adapt to specific circumstances in an interactive way and thus to deepen and broaden the results of the investigation. Personal interviews are comparatively expensive and time consuming. A well-structured questionnaire is needed in order to achieve comparable results. Moreover, the questionnaire and the preparation for the interview have to reflect on the specific socio-cultural setting. Three sets of interviews were conducted:

- Explorative interviews in Switzerland
- Interviews with project partners in India
- Interviews with additional companies and associations in Switzerland and India

Since most interview partners were at least to some degree involved in the Pilot Project or benefitted from the programmes offered, their appraisal might have been biased. This had to be taken into account in the final assessments.

### *Explorative Interviews*

Explorative interviews were conducted with the main project partners at an early stage of the evaluation in order to gain first insight and as a basis for the elaboration of the detailed project design. The table below gives an overview of these eight interview partners.

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<sup>7</sup> Haering, Pohl, Rageth (13.02.2013)



Experts	Institutions
Claudia Lippuner	Project Manager, SERI
Dr. Dalia Schipper	Director, SFIVET
Franz Probst	Former President Swiss-Indian Chamber of Commerce (SICC), Founder, Co-Chairman SkillSonics India Private Limited and Chairman SkillSonics AG <sup>8</sup>
Arthur W. Glättli	Managing Director Vocational Education and Training, Swissmem
G. P. Chandra Kumar	Founder, Chairman and CEO, SkillSonics India Private Limited and Co-Chairman SkillSonics AG
Dr. Franziska Schwarz	Former Director International Relations OPET; Vice Director Federal Office for the Environment (FOEN)
Hanspeter Tanner	Senior VET Consultant, SFIVET
Hans Rudolf Zürcher	Expert Examiner in India, Swissmem

Table 3: List of partners for explorative interviews; conducted between December 2012 and February 2013

### *Interviews with partners of the Pilot Project in India*

The interviews conducted in India in March and April 2013 included members of the SkillSonics team, representatives from the managements of all partner companies, instructors, SVETII trainees, and diploma holders as well as principals of Indian Technical Institutes (ITIs), teachers, and representatives of the Directorates of Education and Training (DET). While all 10 partner companies were included in the investigations, samples had to be drawn for specific interview partners as well as for the ITIs. The selection of interview partners constitutes a random sampling reviewed and complemented by SkillSonics. This procedure assured that interview partners were able to express their considerations regarding the Pilot Project based on their actual involvement.

The table below outlines the interviews conducted in India:

Stakeholders	Interviews (face to face; ACC and Nestlé by phone)				
		Karnataka	Maharashtra	Gujarat	Goa
SkillSonics	5				
<b>Partner companies</b>	10	3	4	2	1
Management of the companies	21 <sup>9</sup>	7	9	4	1
Instructors/ coordinators	16	7	5	4	0
SVETII trainees/ diploma holders	17	7	6	4	0
<b>ITIs</b>	4	2	1	1	0
ITI Principals	4	2	1	1	0
Teachers	15	7	4	4	0
<b>Representatives DETs</b>	2	1	1	0	0
<b>Interviews</b>	<b>80</b>	<b>31</b>	<b>26</b>	<b>17</b>	<b>1</b>

Table 4: Interviews conducted in India in March and April 2013

<sup>8</sup> The report uses the denomination «SkillSonics» for both legal entities.

<sup>9</sup> The set of managing persons interviewed (CEO, HR, production, project manager) varied company by company.

*Interviews with additional companies and associations*

Further interviews were carried out with three companies already in contact but not (yet) partners of the Initiative and with four chambers of commerce/ associations – as shown in the table below. These interview partners were recommended by SkillSonics based on their involvement in the Swiss VET Initiative India.

<b>Companies in India</b>
PackSys Global Ltd., Mumbai
Kavia Engineering Pvt. Ltd., Bangalore
Sulzer India Ltd., Pune
<b>Associations/ Chambers in India and in Switzerland</b>
Swiss-Indian Chamber of Commerce (SICC), Switzerland
Swiss-Indian Chamber of Commerce (SICC), India
Confederation of Indian Industry (CII), New Delhi
National Skill Development Corporation (NSDC), New Delhi

Table 5: Interviews with additional companies and associations/ chambers conducted in August 2013

The companies interviewed shared their considerations regarding the SVETII programme and its potential along with their reflexions in view of eventually joining the Initiative. The assessments provided by the associations deepened the analysis of the framework as well as the overall potential of the Initiative. Yet, it had to be taken into consideration that these organisations are mainly concerned with national politics and are not directly involved in the Initiative.

Last but not least for quality reasons and diffusion of knowledge, the evaluation was accompanied by a Monitoring Committee. The following stakeholders were associated to the Monitoring Committee of this evaluation: SERI, Swissmem, SFIVET, SkillSonics, representatives of the Federal Commission for Vocational and Professional Education and Training: Swiss Conference of Cantonal Ministers of Education, Swiss Federation of Trade Unions, Swiss Employer's Confederation. Details can be found in annexe A-3.

## 2 The Swiss Indian VET Initiative

### 2.1 Objectives and Positioning of the Initiative

#### *Objectives and targets*

Switzerland's interest to position its vocational education and training system at the international level as well as the demand of Swiss companies in India for qualified skills training for their workers were the starting point for the «Swiss VET Initiative India» (SVETII). Against this background, Swiss VET partners<sup>10</sup> together with four Swiss companies based in India started the Pilot Project in 2008. The general objectives of the Initiative were determined as follows:

- *Promoting the Swiss VET system abroad:* Exporting elements of the Swiss system of vocational education and training to other countries, thus positioning the Swiss VET system abroad.
- *Increasing the competitiveness of Swiss companies in India:* Providing qualified employees to Swiss companies in India and thus helping companies to increase their competitiveness.
- *Supporting Indian future professionals:* Supporting Indian future professionals in their vocational education and training.
- *Contributing to bilateral relations:* Contributing to Swiss-Indian relations, based on the Swiss-Indian bilateral friendship treaty, signed on August 14, 1948.

The objectives of the Initiative were clearly documented and understandable for everybody. In addition, elements of systemic relevance to the Swiss VET system were discussed in the framework of the feasibility study<sup>11</sup>. However, such elements were not fixed as standards for the Pilot Project. In order to provide the evaluation with appropriate benchmarks, the following elements were later identified by the Monitoring Committee as being of systemic relevance to the Swiss VET system and at the same time reflecting particular needs of vocational education and training in India:

- Strong corporate responsibility for vocational education and training
- Combining theory and practice in a dual approach
- Competence-oriented approach to teaching
- VET partnership of public authorities, trade organisations and schools

In addition, specific quantitative and qualitative targets were set for the Pilot Project and documented in the contribution requests. Throughout the Pilot Project, these targets were

<sup>10</sup> Such as the Swiss Engineering, Electrical and Metalworking Industry Association (Swissmem), the Swiss Federal Institute for Vocational Education and Training (SFIVET) and the Federal Office for Professional Education and Technology (OPET, today: State Secretariat for Education, Research and Innovation (SERI))

<sup>11</sup> Oberson (05.09.2008)

modified.<sup>12</sup> To what extent the targets have been met will be described in the corresponding chapters of this report. Moreover, a comprehensive table is presented in annexe A-4.

Taken together, the aim of the Pilot Project was to proof whether a transfer of elements of systemic relevance to the Swiss VET system to India is possible («proof of concept»).

*The Initiative in the Indian educational context*

The next figure illustrates the positioning of the SVETII programme within the Indian education system: The programme builds on the 1-2-years industrial training provided by ITIs and offers an alternative to the 1-year training in companies leading to the Indian Apprenticeship Certificate. Thus, the Initiative strengthens the vocational education and training – an important contribution in order to achieve a well-balanced education system in India.

**SVETII in the Framework of the Indian Education System**

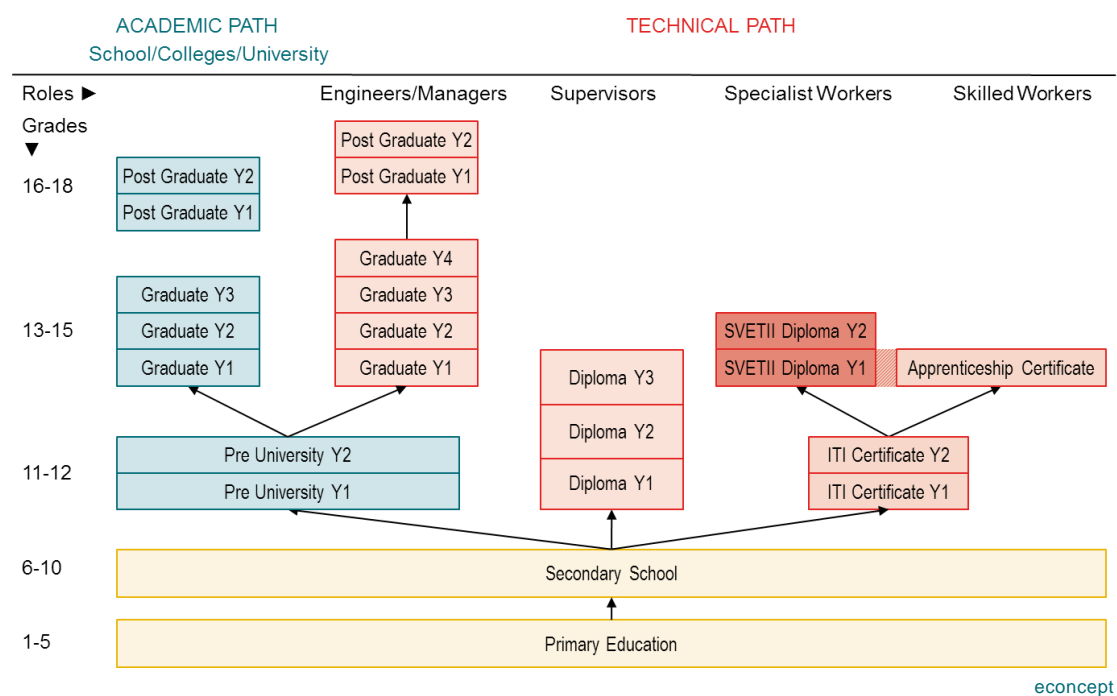


Figure 3: The SVETII programme within the framework of the Indian education system

<sup>12</sup> In particular, the number of companies that was to be involved as partner companies and the question whether Indian companies can be recruited at an early stage seem to have been unclear in the beginning.

## 2.2 Organisational Set-Up, Partners and Procedures of the Pilot Project

The Initiative was established as a public-private partnership with separate project organisations in India and in Switzerland.<sup>13</sup>

### *Project ownership*

At the outset, the project ownership was with the Swiss-Indian Chamber of Commerce (SICC). SICC mandated Nacks Ventures<sup>14</sup> to implement the Pilot Project. In order to benefit from methodological-didactic knowhow regarding vocational education and training and to assure a comprehensive knowhow transfer from Swiss VET partners to the implementation organisation in India, agreements were signed between SICC and SFIVET as well as with Swissmem. Thus, Nacks Ventures was supported in building up knowledge and knowhow regarding the Swiss VET system.

SICC with its broad network and close contacts to the corporate sector in Switzerland and in India was crucial for the initial establishment and positioning of the Initiative. However, during the pilot phase, it became clear that a continuation of the project after 2011 would exceed the Chamber's structures and limited resources and would go beyond its focus of enhancing trade and investment.<sup>15</sup> As a consequence, the project ownership was taken over by Swissmem. Swissmem signed long-lasting, exclusive cooperation agreements both with SkillSonics<sup>16</sup> and SFIVET in order to guarantee the sustainability of the cooperation. Thus, since 2012, the project is run as a self-financed project managed by SkillSonics based in India and in Switzerland.<sup>17</sup>

The partner companies are responsible for providing SVETII training programmes to trainees and to offer the infrastructures and human resources required. Initially, the Pilot Project was limited to Swiss companies. According to the interview partners, the partner companies became involved through personal relations. They had shown particular demand and interest. Hence, there had been no systematic recruitment. This informal procedure was chosen in order to be able to start the Pilot Project rapidly.

### *Project organisation*

The project organisation reflects the specific approach of the Initiative as well as particular needs of the Pilot Project. The lead was and still is with the partner companies – facilitated by SkillSonics, whereas the authorities were/are, respectively should be, supporting. This approach allowed a fast implementation and was suitable for the pilot phase. A scaling-up of the Initiative based on the participation of further companies and trades was aimed at after completing the pilot phase.<sup>18</sup>

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<sup>13</sup> SICC (29.09.2009; 30.06.2011; 20.04.2012)

<sup>14</sup> Private company known through existing contacts

<sup>15</sup> SICC (30.06.2011, p. 26)

<sup>16</sup> The project team of Nacks Ventures with its knowledge accumulated throughout the project was taken over by SkillSonics.

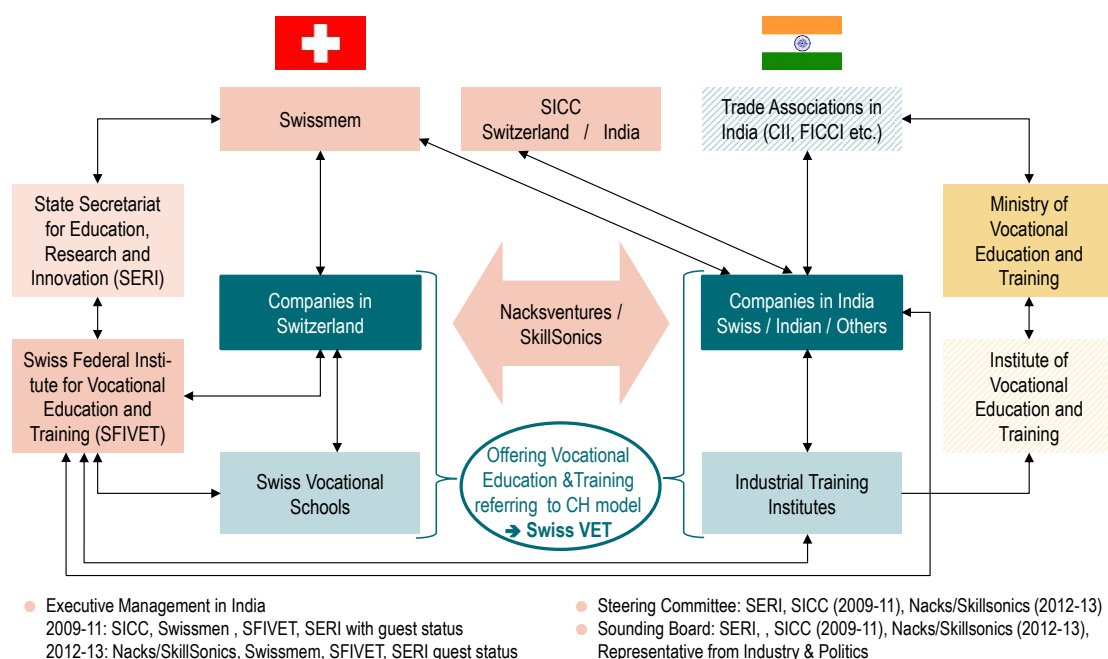
<sup>17</sup> SICC (30.04.2012, p. 2)

<sup>18</sup> SICC (30.06.2011, p. 11)

The project organisation also reflects the fact that in India trade associations are not (yet) engaged in vocational education and training and stakeholders are not (yet) co-organised the way Swiss VET partners are. Thus, the local implementation organisation had (and still has) to assume the tasks of coordinating companies, developing training material, organising exams etc.<sup>19</sup>. In the interviews, many stakeholders stressed the decisive role Nacks Ventures and today SkillSonics played/ still plays in facilitating the cooperation of partners involved.<sup>20</sup>

The following figure gives an overview on the project organisation and the main partners:

### Overview of the Pilot Project: Switzerland-India



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Figure 4: Organisational set-up and main partners of the SVETII Pilot Project

The particular responsibilities of the main partners and bodies of the Pilot Project are summarised in the next table:<sup>21</sup>

Institutions	Responsibilities
<b>Project Organisation</b>	
SICC	Project ownership in the pilot phase / responsible for managing and coordinating the Pilot Project, overall administration, securing funding, link b/n companies, private sector organisations, political institutions, reporting, expansion
SERI	Co-Initiator, link to governments, VET knowhow, supervision, general assistance
Swissmem	Project ownership after the pilot phase, industry partner, development of curriculum, training and examination documents, supervision of technical training of instructors, teachers, and examiners, audits, quality management and final examinations, issuing of SVETII diplomas

<sup>19</sup> SICC (30.06.2011, p. 19)

<sup>20</sup> To some extent, SkillSonics assumes the tasks of the Cantons in the Swiss VET system (i.e. selection of teachers).

<sup>21</sup> See contribution requests (2009, 2010-11, 2012-13) and project reports (SICC 29.09.2009; 30.06.2011; 20.04.2012)

Institutions	Responsibilities
SFIVET	Education partner, methodological-didactic training of teachers, instructors, and training of examiners, training in and delivery of methodology to develop professional profiles
Nacks Ventures/ SkillSonics	Management and implementation of the Initiative in India, adaptation of curriculum (commissioned by SICC and Swissmem)
Steering Committee	Supervision, networking, monitoring of the progress of the Initiative (2-4 meetings p.a.)
Sounding Board	Information, exchange of views: CII, FICCI, Central and State Government Directorates (1-2 meetings p.a.)
Executive Management	Manages and oversees implementation of the Initiative (meetings when required)
Working groups	Nine working groups have been appointed that are responsible for specific tasks. <sup>22</sup>
Swiss experts	Swiss experts were mandated for technical advice and training of teachers and instructors.
<b>Project partners</b>	
DGET	Bilateral cooperation on the national level, support confirmed in bilateral discussions
DET, DVET	MOU with SICC India for the Pilot Project regarding vocational education and training cooperation including confirmation that local ITIs can dispose their infrastructures and teachers for the participation in the Swiss VET Initiative in India.
ITIs	The ITIs are providing the classroom instruction portion of the SVETII programme based on MOUs with states <sup>23</sup> . The Initiative was mentioned by the interview partners as one of the few vocational education and training projects including local ITIs. The Initiative builds on the basic ITI training and prepares the SVETII trainees for the Indian apprenticeship certificate.
CII and FICCI	Agreements with SICC regarding educational cooperation mentioning the Swiss VET Initiative in India, important contact points for relevant industrial associations and private sector companies

Table 6: Responsibilities of main partners of the SVETII Pilot Project

The qualitative and quantitative targets for the Pilot Project with regards to the organisation and partners of the Initiative are presented in annexe A-4.

The organisational set-up reflected the needs of the Pilot Project. However, it appears to be a complex structure relying on the enthusiasm of partners involved and their goodwill to solve problems in an un-bureaucratic way and in the interest of the common goals of the Initiative.

### 2.3 Concept and Implementation of the Pilot Project

The implementation concept was developed based on the feasibility study and considering demand identified beforehand. It was based on the principle of transferring knowhow and responsibilities to the fullest extent possible from Swiss VET partners to partners in India. The local project management was responsible for the concept and the implementation of the Pilot Project in India.

<sup>22</sup> See contribution requests. 1) technical training and assessment / 2) pedagogic training and assessment, examiners training / 3) pilot project closure 1 / 4) pilot project closure 2 / 5) course delivery, content management, upgrading / 6) expansion (companies, models) / 7) documentation & resources / 8) finance, budget, administration, legal / 9) public relations and communication

<sup>23</sup> From an administrative standpoint, ITIs are subject to the Directorates of Employment and Training. The MOUs were signed with SICC for the Pilot Project; new MOUs are now required due to the new organisation of the Initiative after pilot closure.

The Initiative integrates elements of systemic relevance to the Swiss VET system and at the same time takes into account the Indian context.<sup>24</sup> The profile of the Swiss profession «EFZ<sup>25</sup> Anlage- und Apparatebau» was taken as starting point – adding elements of other professional fields (incl. polymechanics). Thus, the transfer did not primarily aim at implementing identical contents; the transfer of methods as well as of organisational and structural principles of the Swiss vocational education and training system was of even higher importance.<sup>26</sup> To what extent these systemic elements were transferred by the Pilot Project, can be summarised as follows.

*Corporate responsibility:* The Swiss VET system is based on a strong responsibility of companies for the training of their employees.

The Pilot Project was set up as a public-private partnership. Partner companies assume their responsibility and assure the dual character of the training. They also contribute financially and they do consider this as an important investment in the quality of their workforce.

*Combining theory and practice:* Combining practical training of employees «on the job» with theoretical instructions in the classroom is a basic element of the Swiss VET system.

The Pilot Project includes training «on the job» at the companies' production sites as well as theoretical teaching, mainly provided by teachers of ITIs. In the interviews, SVETII trainees underlined that theory and practice are well attuned. Mainly due to long commuting distances but also to have better control of SVETII trainees, some companies prefer to offer also the theoretical teaching in their own premises and not at the ITI. As a positive side effect, this fosters the exchange between instructors and teachers and the coordination of the training.

*Competence-oriented approach:* The Swiss VET system is based on a competence-oriented approach of training. Competence-oriented training emphasises the transmission of the type and level of competences required in a specific professional field. Learners acquire competences<sup>27</sup> to master professional tasks in theoretical and practical settings.

The Pilot Project implemented this approach to education and training. Together with the multi-skilled approach, this implicated an important paradigm shift for the Indian education system. Thus, teachers and instructors had to be made aware of this new approach and enabled to address their students accordingly.<sup>28</sup> The stakeholders interviewed appreciated the fact that the Initiative is delivering a competence-based training including not only technical skills but social competences along with other soft skills. Teachers, instructors, and the management of the companies emphasised the extent to which the SVETII trainees were encouraged to develop self-confidence and

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<sup>24</sup> SICC (30.06.2011, p. 6)

<sup>25</sup> Eidgenössisches Fähigkeitszeugnis (EFZ)/ Federal Diploma of Vocational Education and Training (Federal VET Diploma)

<sup>26</sup> This required an initial feasibility study to identify elements suitable to be transferred (Oberson 05.09.2008).

<sup>27</sup> I.e. resources: abilities, knowledge, skills, and attitudes

<sup>28</sup> SICC (30.06.2011, p. 11ff.)



to take over responsibility for their work, thus working more productively and independently.

*VET partnership:* The Swiss VET system strongly relies on the well-established cooperation of public authorities, trade organisations and VET-schools.

The Initiative works in a context without any tradition of cooperation among authorities, schools and companies in view of a shared responsibility for vocational education and training and the Pilot Project has not yet been able to develop formal and sustainable ties among the VET partners in India including training institutes, trade-organisations, and authorities. SkillSonics as a private company assumes the function of facilitating the cooperation of the partners. Thus, this core aspect of the Swiss VET system has up to now only been transferred partly.

The Pilot Project developed step by step and in general followed the initial concept. Most elements identified as being of systemic importance to the Swiss VET system have been transferred and no element has explicitly been excluded. However, the establishment of a sustainable VET partnership in India has not yet been successful.

The interview partners acknowledged that the Pilot Project entailed an important learning process for all partners since the Initiative was an entirely new endeavour for all partners involved. In its implementation, the Indian context, i.e. the lack of an institutionalised partnership of companies, training institutions and public authorities, as well as specific socio-cultural aspects had to be taken into account.

The development of the Initiative is shown in the next figure and described in the following paragraphs.

### Implementation Phases

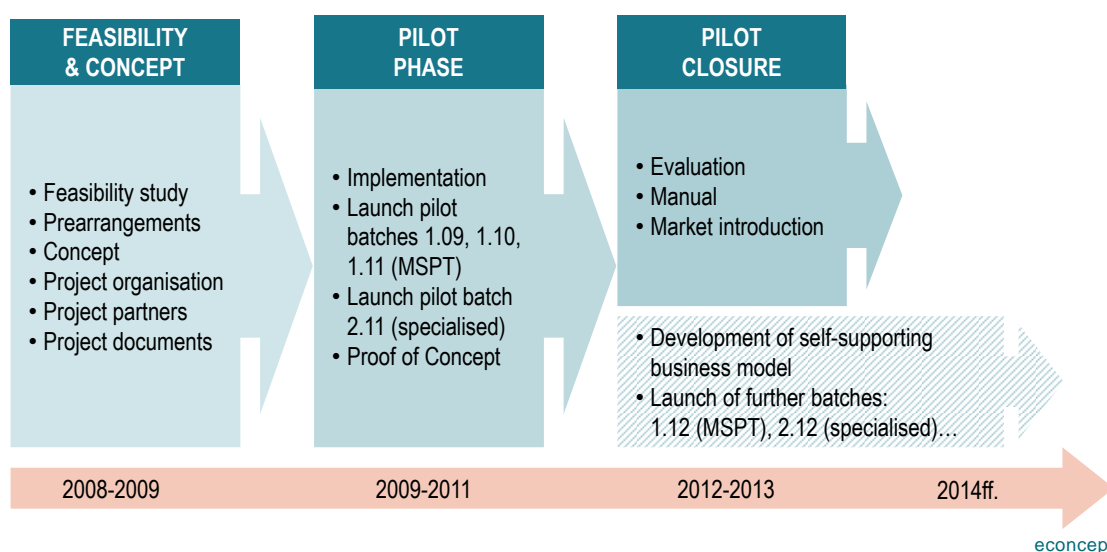


Figure 5: Swiss VET Initiative India from 2008 until 2013 in three phases (based on SICC 29.09.2009)

## Feasibility study and elaboration of concept

**2008:** The objectives and the concept of the Initiative were elaborated based on ground-work carried out during the first phase of the Initiative (2008-2009). Following India's interest in the Swiss VET system and responding to the demand of Swiss companies based in India for qualified workers, a feasibility study was conducted by the OPET together with the SICC analysing the VET system in India and identifying possible concepts for a sustainable implementation of the Swiss VET system in India, while taking into account the specific socio-cultural and economic context in India.<sup>29</sup> Moreover, possible locations and vocational fields were identified. By means of a VET-mission<sup>30</sup> and a comprehensive survey with interested companies, needs, and interests of Swiss companies in India with regards to the vocational education and training were clarified. The Initiative aimed at implementing a dual, market-oriented VET system accommodating the demand of Swiss companies in India and at the same time considering the Indian framework.<sup>31</sup>

## Pilot phase

**2009:** According to the contribution requests for 2009 and 2010-2011, the preparations for the implementation of the Pilot Project started in 2009 with two technical missions on expert level in January and March 2009 determining the precise requirements of participating companies. In the framework of the VET mission in July 2009, the SICC was able to finalise the Memorandums of Understanding (MOU) with the two pilot states Karnataka and Maharashtra as well as with the CII and FICCI. At the same time, the Pilot Project organisation was completed and the curriculum prepared based on curricula from Switzerland. The profile of the Swiss profession «EFZ Anlage- und Apparatebau» was taken as a starting point.<sup>32</sup> This profile was enriched with elements of other professional fields according to the requirements of local subsidiaries of the partner companies. Experts and companies agreed on including professional competencies in the fields of mechanics, fitting and welding focussing on multi-skilling and quality aspects. The training and the diploma provided therefore were characterised and named «Multi Skilled Production Technician» (MSPT).

October 2009 was fixed for the start of the first pilot batches of the Swiss VET Initiative in Pune and Bangalore. In total, four subsidiaries of Swiss companies<sup>33</sup> at two locations (Bangalore and Pune<sup>34</sup>) participated in the first batch of the Pilot Project in 2009. These 19 pioneer SVETII trainees started a 2-year-programme for MSPT based on their basic

<sup>29</sup> Oberson (05.09.2008)

<sup>30</sup> The mission to four locations in India was headed by the OPET and SICC together and included meetings with Swiss and Indian companies, Indian authorities, and vocational training institutes.

<sup>31</sup> In 2009, around 170 Swiss companies employing about 60,000 staff were operating in India through joint ventures or subsidiary companies (incl. branch offices). The majority of these companies are engaged in traditionally strong Swiss business sectors, such as engineering and industrial equipment, services, chemicals and pharmaceuticals, and precision instruments/ equipment (Embassy of Switzerland in India 2010, S. 13f.).

<sup>32</sup> SICC (29.09.2009, p. 7ff.)

<sup>33</sup> Bobst India Pvt. Ltd., Burckhardt Compression India Pvt. Ltd., Buhler India Pvt. Ltd., and Rieter India Pvt. Ltd.

<sup>34</sup> Two reasons were pivotal for the choice of locations: clusters of Swiss industrial companies and the special interest of Swiss industrial companies with factories at these locations (SICC 30.06.2011, p. 5).

ITI training (see figure 4, p. 12). The SVETII trainees spent 1-2 days at a local ITI, taking theory classes. The rest of the week<sup>35</sup>, they got trained in practical tasks at their company. SVETII teachers, conducting the theory classes, instructors, responsible for the practical part of the training as well as examiners were trained by the Initiative.

A SICC/ Swissmem mission took place end of October/ beginning of November 2009 in order to evaluate the start of the first courses and to figure out how to ensure quality control. Moreover, options to scale-up the project were examined. The start of the Initiative was accompanied by a number of events to introduce and promote the Initiative to a broader public in Delhi, Mumbai, Pune and Bangalore.

**2010:** In 2010 and 2011, the Pilot Project was expanded to further companies<sup>36</sup> and locations (Vadodara and Anand/ Karamsad, Gujarat in 2011; see overview on implemented programmes in annexe A-6). Furthermore, the training material was adapted and the structure of exams was finalised along with the training of examiners. Moreover, discussions exploring the mutual recognition of the SVETII diploma, the development of institutions required for VET, such as an Indian organisation akin to SFIVET, took place.

**2011:** In May 2011, VET officials from India went on a first mission to Switzerland.<sup>37</sup> A further important milestone was the completion of the first training in autumn 2011.<sup>38</sup> The first final examination for the MSPT-programmes took place in Bangalore and Pune. According to the Swiss expert observing the practical examination and coaching the chief examiner, the exams were well prepared and all project partners cooperated excellently. Nevertheless, he identified deficiencies regarding the infrastructures provided by some companies. Some trainees had to use old fashioned machines that sometimes were also not in good shape, other trainees had to share their tools. Thus, the examination situation was not the same for all candidates. Ideally, the machines and tools used for the production on the shop floor should also be provided for the training and examination of the SVETII trainees. Moreover, the candidates were often not as precise and accurate as expected in final examinations.<sup>39</sup>

At the end of the pilot phase in 2011, a final assessment of the results was carried out by the project organisation.<sup>40</sup>

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<sup>35</sup> In India, the working week usually consists of 6 days.

<sup>36</sup> 2010: Starrag India Pvt. Ltd.; 2011: EFD Induction Pvt. Ltd., ABB Limited, and GMM Pfadler Ltd.

<sup>37</sup> See contribution request 2012-13

<sup>38</sup> 18 SVETII trainees passed these final examinations; one trainee left the programme due to family reasons.

<sup>39</sup> Zürcher (19.10.2011)

<sup>40</sup> SICC (30.06.2011; 20.04.2012)

## Pilot closure

**2012/13:** The extension of the Pilot Project for another two years (pilot closure) and the corresponding public financial contribution from Switzerland provided the batches 1.10 and 1.11 offering the opportunity to complete their 2-years-MSPT-training even if the Initiative would not be continued.<sup>41</sup>

At the same time, the programme was further expanded<sup>42</sup> and more teachers, instructors and examiners were trained. The project ownership was taken over by Swissmem (see chapter 2.2). This implied that agreements and MOUs with different project partners needed/ need to be renewed.<sup>43</sup> As in previous years, public interactions took place including participating at events organised by various marketing activities and introducing the Initiative to potential new stakeholders.

Regarding the second final examinations, the (same) Swiss expert noticed an improved information level of candidates thanks to the information provided by the SVETII trainees. Improvements could also be seen regarding the preparation of the machines and tools. However, the observer still questioned the attunement of the training material and syllabus as well as their implementation by partner companies. Expanding the number of SVETII trainees could lead to problems regarding the availability of tools and examiners needed for the final examination, he assumed.<sup>44</sup>

Following the contribution request 2012-2013, an additional mission of Indian representatives of vocational education and training to Switzerland was carried out in 2012.

Simultaneously – and independently from the public contribution – activities in view of the Initiative's sustainability were introduced, based on a private business model and in collaboration with Swiss partners.

**2014:** The internal final report has been transmitted by the project owners in March 2014. Moreover, a manual shall be developed regarding future similar projects in other countries.<sup>45</sup>

<sup>41</sup> See contribution request 2012-2013; In 2012, 22 SVETII trainees passed the final MSPT examinations and 13 SVETII trainees completed their specialised 1-year-programme, while 4 SVETII trainees did not pass the final assessments.

<sup>42</sup> 2012: ACC Limited in Chandrapur

<sup>43</sup> According to SkillSonics, the negotiations with the states for the new MOUs are in final state. However, some states already gave the permission to work with ITI teachers.

<sup>44</sup> Zürcher (06.11.2012)

<sup>45</sup> The publication of the manual was postponed and will be delivered after the SVETII pilot closure.

The following table presents the targets set for the pilot phase and pilot closure of the Initiative and to which extent they have been achieved so far:

Targets	2009	2010-2011	2012-2013
<b>Achievements</b>	<b>2009-2011 (pilot phase)</b>		<b>Until spring 2013 (pilot closure)</b>
<b>Locations</b>	Pune, Bangalore, potentially Mumbai	Expand from 2 to 4	4 existing (Pune, Bangalore, Anand, Chandrapur) plus additional locations depending on new partner companies
	2009-10: 2 locations (Bangalore, Pune) 2011: 4 locations (Bangalore, Pune, Chandrapur, Anand)		6 locations are currently included in the Initiative: Bangalore (Karnataka), Pune (Maharashtra), Chandrapur (Maharashtra), Anand (Gujarat) Vadodara (Gujarat), <i>Bicholim (Goa, not yet started)</i>
<b>Industrial Training Institutes (ITI)</b>	2-4 ITI	Involve ITI in new locations	4-9 ITI
	Teachers from the following 14 ITIs were trained 2009-2011 <sup>46</sup> : <b>Bangalore (Dist.):</b> ITI Hosur Road, ITI Peenya, ITI Hubli, ITI Belgaum, ITI KGF, ITI Wilson Garden, ITI Hosakerehalli <b>Pune (Dist.):</b> ITI Aundh, ITI Shirur, ITI Bhor, ITI Wai <b>Chandrapur:</b> ITI Chandrapur <b>Vadodara/ Karamsad/ Anand:</b> ITI J.V.Patel, ITI Vidhyanagar		Teachers from the following 17 ITIs were trained from 2009 until spring 2013: <b>Bangalore (Dist.):</b> ITI Hosur Road, ITI Peenya, ITI KGF, ITI Wilson Garden, ITI Hosakerehalli, ITI Hubli, ITI Belgaum <b>Pune (Dist.):</b> ITI Aundh, ITI Wai, ITI Bhor, ITI Shirur, ITI Abhinav <b>Chandrapur:</b> ITI Chandrapur <b>Vadodara/ Karamsad/ Anand:</b> ITI Anand, ITI Ebrahim Bawany, ITI J.V.Patel, ITI Vidhyanagar <b>Goa:</b> ITI Bicholim In the meantime some teachers may have moved to other ITIs. In addition, teachers from private ITIs and polytechnics as well as free-lancers are involved when and where needed.
<b>Partner companies</b>	Involve 3-5 Swiss and 1-2 Indian companies	Increase to 40 companies <sup>47</sup>	Involve 7-10 Swiss companies and 1-3 other companies <sup>48</sup>
	5 pilot partner companies (all Swiss): Buhler (India) Pvt. Ltd., Starrag India Pvt. Ltd., Bobst India Pvt. Ltd., Burckhardt Compression (India) Pvt. Ltd., Rieter India Pvt. Ltd.		In total, 10 companies joined the Initiative <sup>49</sup> whereof 9 companies already started with the training <sup>50</sup> Thereof: 8 Swiss companies / 1 German company / 1 Indo-American company
<b>Programmes</b>	2-3 years	2 years	1-2 years (in consultation with partner companies)
	MSPT programmes: 2 years		MSPT programmes: generally 2 years, one company with 1-year-programme <i>Specialised programmes (welding, electrical, machinist): 1 year</i>

Table 7: Objectives and achievements regarding locations, ITIs, companies, and programmes (sources: contribution requests, project reports, compilations by SkillSonics, and interviews in India)

<sup>46</sup> As no detailed and up-to-date information about the ITIs involved in the Initiative is available, the ITIs of teachers trained in the SVETII trainings are taken as approximate figure.

<sup>47</sup> Including vendors of companies and Indian companies active in Switzerland

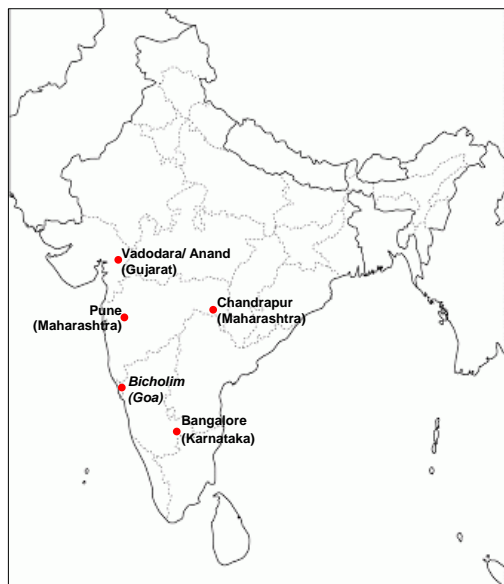
<sup>48</sup> Other than Swiss partner companies have to pay a fee per trainee for the project organisation/ coordination.

<sup>49</sup> See annexe A-7 for detailed information on the companies involved in the Pilot Project.

<sup>50</sup> Nestlé has not yet started with the training as the MOU with the DET is currently pending in Goa.

The map below indicates geographically where SVETII programmes have been implemented in the context of the Pilot Project.

### Locations of SVETII Activities (Pilot Project)



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Figure 6: Locations of activities of the SVETII Pilot Project in spring 2013 (source of map: <http://www.landkartenindex.de/kostenlos/?p=317>)

## 2.4 Conceptual Changes

Interview partners mentioned some conceptual changes that have been made based on first experiences as well as due to requirements of project partners. Thus, additional trainings in English were introduced, taking into account the language problems of many SVETII trainees. From batch 1.10 on, SVETII trainees had to take 50 English lessons during the first 25 weeks of their training. Moreover, the curriculum had to be redone since more specifications and guidelines were needed in order to reduce the preparation time of teachers and to guarantee comparable standards for all classes.<sup>51</sup> At the same time, national customs and standards had to be reflected in a stronger way<sup>52</sup> and the syllabus had to be made more flexible to meet different needs of partner companies. Thus, some optional topics were added to the mandatory subjects.

The following changes took place after the closure of the pilot phase:

- Additional one-year programmes in new trades such as welding, electrical, and machinist are offered. The reasons for offering such additional programmes were particular needs of partner companies.

<sup>51</sup> Today, comprehensive information for each lesson is provided to the teachers, incl. topics, learning targets, material that needs to be used and references to the book.

<sup>52</sup> SICC (30.06.2011, p. 9)

- In addition to working with the government ITIs, freelance theory teachers and teachers from private ITIs were hired to compensate for public ITI-teachers not being available – be it because of the general shortage of teachers or as a consequence of missing MOUs. Furthermore, more and more companies are conducting theory classes on their premises in order to have better control over these lessons and to prevent long commuting distances of their trainees.

Major developments are still under way in order to improve the Initiative, to offer demand-oriented programmes for the industry, and thus to achieve sustainability:

- Set-up of additional locations in main manufacturing zones
- Participation of additional Swiss, international, and Indian companies
- Involvement of Indian associations and renewal of the MOUs with the States
- Integration of further trades (i.e. painting) and sectors (i.e. food technology/ processing, pharmaceutical, commercial sector)
- Additional long- (2-3 years) and short-term courses (i.e. painting, machine operators)
- Development of MSPT competence profiles for teachers, instructors, mastertrainers, and examiners
- Improvement of final assessments

To what extent these developments will contribute to a sustainable future of the Initiative cannot be assessed yet.

## 2.5 Financial Resources of the Pilot Project

The total cost of the Pilot Project is analysed in the final report<sup>53</sup> and the financial statements submitted to SERI (for details see annexe A-8). During the pilot phase (2009-2011), CHF 7.6 Million were spent.<sup>54</sup> For the pilot closure, another CHF 3.7 Million were invested. These figures include development as well as recurring costs. Around 47% of the total costs of the Pilot Project were covered by public funds provided by the SERI<sup>55</sup>; the remaining 53% were covered by private contributions.

### *Costs per SVETII trainee*

The costs per SVETII trainee presented in the table below can only be taken as approximations since the financial data do not permit a break down into real operative costs per trainee. However, the numbers underline to what extent the costs per SVETII trainee depend on the number of trainees.<sup>56</sup> This is due to the important investment costs relative to the still short runtime of the Initiative. The companies' average costs per trainee indicate the investments that the partner companies had to make in order to implement the programme, especially at its beginning. A close look at the financial statements of the

<sup>53</sup> SICC (30.06.2011, p. 24)

<sup>54</sup> Thereof CHF 3.6 Mio. public contributions; the budget foreseen for the Initiative has not been exploited completely.

<sup>55</sup> Based on art. 4 and art. 54 of the Federal Vocational and Professional Education and Training Act.

<sup>56</sup> The business plan of SkillsSonics foresees a major scaling up of the Initiative (in terms of trainees, locations and partner companies) as well as related marketing activities.

companies reveals that the costs per SVETII trainee vary significantly between partner companies.

The following table outlines the financial results of the Initiative:

	2008/09	2010	2011	2012	2013	Total
Total cost [CHF]	2'375'344	1'647'640	3'568'747	2'072'330	1'647'926	11'311'987
% public contribution	41.5%	42.5%	54.3%	36.8%	36.4%	44.1%
% private contribution	58.5%	57.5%	45.7%	63.2%	63.6%	55.9%
Number of SVETII trainees per year*	18	40	134	116	81	134
			MSPT: 121	MSPT: 103		MSPT: 121
Total cost per SVETII trainee [CHF]	131'964	41'191	26'632	17'865	20'345	84'418
<b>Total cost for companies in India [CHF]</b>	<b>596'038</b>	<b>261'999</b>	<b>914'977</b>	<b>784'349</b>	<b>391'896</b>	<b>2'949'259</b>
Average cost for companies per SVETII trainee [CHF]**	33'113	6'550	6'828	6'762	4'838	22'009

Table 8: Total project cost of SVETII Pilot Project 2008/09-2013; \*being in training in that year, minimal amount of drop-outs not included; \*\*approximate figure (some companies only reported cost partially) (source: financial statements of project submitted to SERI)

### Costs per project partner

The following figure shows that in the framework of the Pilot Project, private sector contributions to the SVETII programme largely consisted of investments made by partner companies (up to 59.9%). In contrast, public funding mainly covered the expenses of the institutions which were/ are responsible for the implementation and coordination of the project: SICC Switzerland/ India and Nacks Ventures/ SkillSonics. The latter is the only project partner whose expenditure for the Initiative was almost completely covered by public funds. Moreover, Swissmem and SFIVET were highly involved in the knowhow transfer from Switzerland to India and benefitted from public funding. At the same time, these two institutions invested considerable personnel resources.

### Costs of the Pilot Project per Project Partner

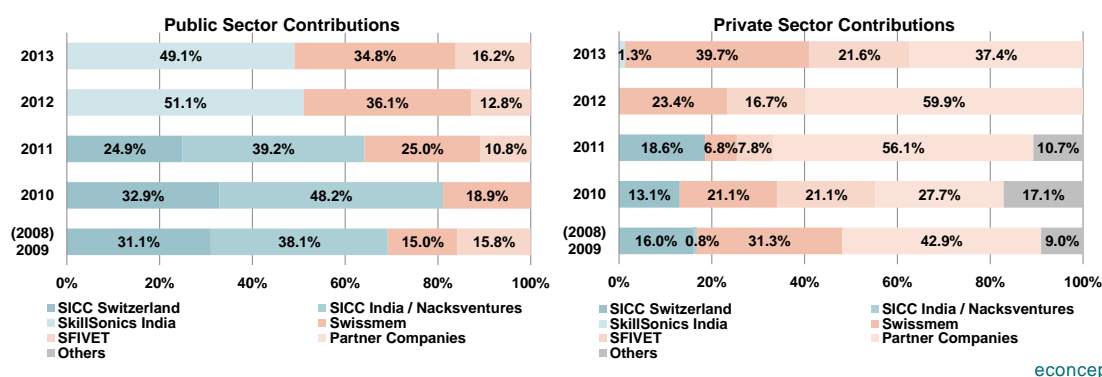


Figure 7: Allocation of the Initiative's costs to the project partners (private sector contributions borne by the particular partners; source: financial statements of project submitted to SERI)



As shown in the next figure, a large share of public funding was used to cover salaries and fees of project partners. Besides, public funding was used for infrastructures, production of material, office, administration, and travel expenses (especially in the first year).

### Costs of the Pilot Project per Category

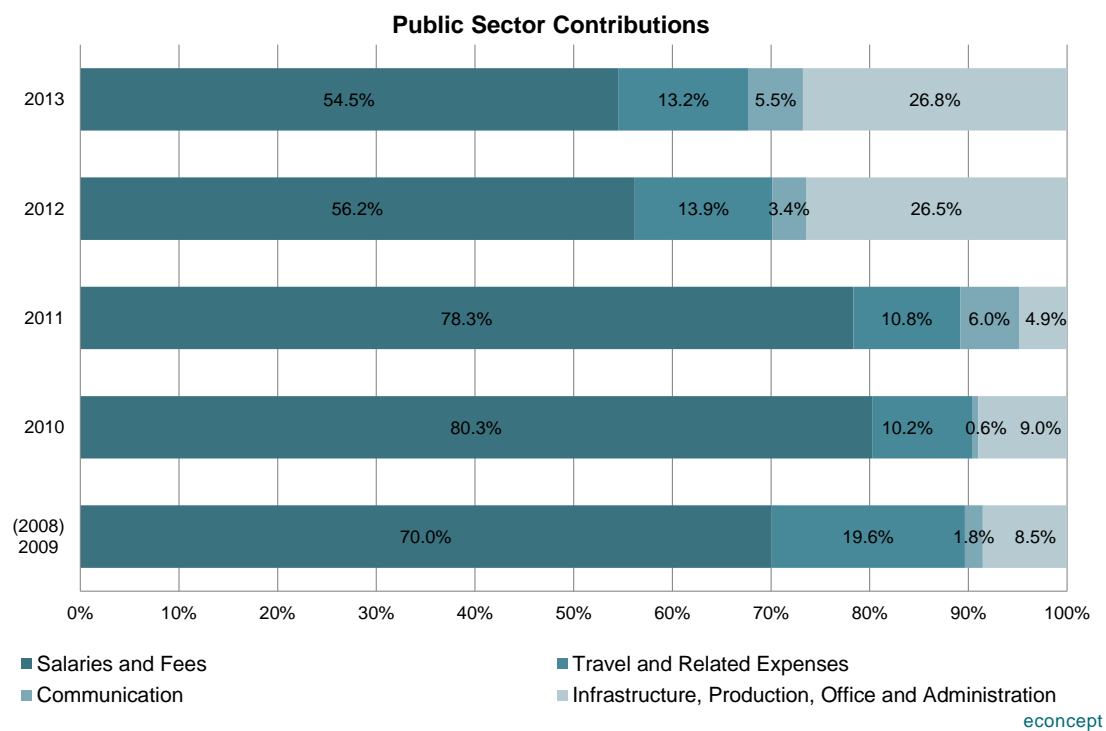


Figure 8: Allocation of public contributions (source: financial statements submitted to SERI)

### Efficiency of the Pilot Project

It was not possible to assess the efficiency of the individual partners involved. Hence, no detailed conclusion regarding the efficiency of the Pilot Project can be provided. However, the evaluation did not find any evidence of an explicitly inefficient use of public funding. The budget foreseen for the Initiative has not been exploited completely; this may also indicate in this direction. Moreover, the Initiative's financial statements were reviewed by Pricewaterhouse Coopers Ltd. The review concludes as follows: «[...] nothing has come to our attention that causes us to believe that the Financial Statements are not in accordance with Swiss law.»<sup>57</sup>

## 2.6 Quality Assurance of the Pilot Project

Various quality assurance measures have been implemented addressing specific aspects of the Initiative. The quality assurance measures in place can be summarized as follows:

- *Audits conducted by SkillSonics*: Pre-course as well as pre-examination audits take place in partner companies and ITIs in order to assure that everything is prepared for

<sup>57</sup> Pricewaterhouse Coopers (26.03.2012, p. 1)

the training respectively the exams. Moreover, annual audits are taking place in partner companies and ITIs to assess how the programme is under way generally. An annual audit of the activities of SkillSonics by Swissmem is foreseen in the agreement. However, this has not yet been established.

- *Assessments of SVETII trainees:* Early pre-assessments of the SVETII trainees regarding their practical capabilities are taking place 3-4 months into the first semester. These pre-assessments are conducted by SkillSonics and their results are discussed with the SVETII trainees and instructors. Moreover, regular knowhow assessments for each learning chapter have been designed and are applied by the companies.
- *Assessment of SVETII instructors:* Based on the demand of the companies, the SFIVET conducted an assessment of a selected group of instructors in 2012.
- *Exchange of lessons learnt:* Cross-coordination meetings including SkillSonics, companies, instructors, and teachers are taking place on a monthly basis. In addition, feedback forms are filled out by the SVETII trainees regarding the quality of the training and the infrastructures/ equipment and analysed twice a year by SkillSonics.
- *Target achievement:* According to the contribution request 2012-2013, the following measures were set in place in order to enable a continuous follow-up regarding the achievement of the project objectives (without further specifications):
  - Quarterly meetings of the Steering Committee (plus SERI)
  - Quarterly audits through technical experts and mastertrainers
  - Quarterly audits with relevant reports to SERI
  - Regular meetings with the project management teams
  - Review regarding milestones by project management
  - Continuous identification of risks regarding target achievement and taking actions

Taken together, a variety of internal quality measures have been put in place in the framework of the Pilot Project. However, there is no overall quality management system and no systematic external view built in the quality management.<sup>58</sup>

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<sup>58</sup> The quality control is now taken over by SkillSonics Quality Department.

## 3 Output of the Pilot Project

### 3.1 Training Material and Infrastructures

#### *Training material*

According to the project reports<sup>59</sup>, Swissmem in collaboration with Swiss experts was responsible for the development of the curriculum and the training material, based on the Swiss material as well as on the local requirements.<sup>60</sup> Extensive training material<sup>61</sup> including books, presentations, reference tables, animations, videos, case studies etc. has been developed for almost all subjects taught within the Pilot Project.<sup>62</sup> Together with other training material, the curriculum was then translated into English. The material was further developed, taking into account feedbacks of teachers and instructors (see chapter 2.3, p. 16). The teachers were given hardcopies of the training material and later on also a CD-ROM. The training material was appreciated by the SVETII trainees as well as by the instructors and teachers. They underlined the quality of the visualisations, facilitating interactive teaching and improving learning conditions. Some SVETII trainees would appreciate even more visualisations, examples, and case studies. The Swiss mastertrainers acknowledged the frequent use of the training material by teachers and instructors.<sup>63</sup> However, some teachers and instructors and many SVETII trainees interviewed criticised the sophisticated technical English used in the training material; shorter sentences would be appreciated. Moreover, they underlined the need for enhanced English training. Some would prefer the training material to be translated into local language.

In addition to the training material provided by the Initiative, some companies seem to make use of further training material developed by their (mother) company. According to SFIVET, a «basics of didactics» (English book addressing basics of didactics with focus on secondary education) is under preparations.

For the final examination within the MSPT programme, a final assessment plan has been developed by the chief examiner. It provides guidelines for the assessment team for the planning and execution of the final examination. Thus, the document presents the schedule for the examination, its scope and modules, evaluation criteria, responsibilities of examiners, and instructions for the calculation of the final marks<sup>64</sup>. Together with this plan, suggestions regarding the procedure, preparations, and assessments were handed out to the instructors and examiners. The questions for the final assessments are devel-

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<sup>59</sup> SICCC (29.09.2009; 30.06.2011; 20.04.2012)

<sup>60</sup> Some interview partners mentioned that not the whole set of training material had been made available at the start of the programme but had been developed subsequently.

<sup>61</sup> The training material provided by the Initiative has not been assessed in form and content.

<sup>62</sup> The interview partners spoke about a lack of visualisations regarding the theoretical part of electrics. Moreover, some teachers identified some mistakes and discrepancies between the teachers' books and the SVETII trainees' books.

<sup>63</sup> Nydegger, Tanner (26.07.2011, p. 2)

<sup>64</sup> In contrast to Switzerland, the marks from the pre-assessments made by internal experts count for the final marks of the SVETII training.

oped by a Swiss expert and by SkillSonics. Finally, in view of the quality assurance, the tasks are validated by Swissmem.

### *Infrastructures*

In order to implement the SVETII programme, particular infrastructures had to be made available:

- *Classrooms* equipped for the theoretical training (desks and chairs, computer, beam-er, white board) – be it in the ITIs or in the companies
- *Training infrastructures* for the practical training, incl. specific facilities, machines and tools, thus meeting the requirements set by SkillSonics and Swiss experts

Thus, companies had to invest and/or still are investing in infrastructures and equipment. Some interview partners mentioned that some companies started with old infrastructures (i.e. second hand machines), but rapidly realised that better equipment impacts the quality and the skills of their trainees. Whereas some companies largely benefitted from the knowhow and support of their mother companies in Switzerland in setting up the training facilities, other companies do not yet meet the expectations regarding infrastructures. While in some places, SVETII trainees use facilities and machines dedicated specifically to the training («training centres»), other companies have to make their production machines available for parts of the trainings. Moreover, some companies make use of facilities and machines of other companies or institutions for specific trainings, as they do not dispose of all machines required. The classrooms used for the theory teaching within the SVETII Pilot Project are generally well equipped and meet the requirements.

## **3.2 Teachers, Instructors, Examiners and Mastertrainers**

### *Recruitment of instructors*

In general, the management of the companies selected the instructors from their workforce based on their professional experience, the existence of an engineering diploma and their motivation and ability to address SVETII trainees. Their requirements and profiles were discussed beforehand with experts from SFIVET and Swissmem.<sup>65</sup> Instructors were chosen for particular subjects based on their experience and specialist knowledge. Some qualified coordinators were explicitly hired for this job.

Nevertheless, the Swiss mastertrainers observed large differences in the skills and capabilities within the group of instructors. Some instructors lack practical professional experience, some have poor English skills and none of them were familiar with new teaching methods.

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<sup>65</sup> SICC (29.09.2009, p. 10)

### Recruitment of teachers

Working together with local ITIs can be considered as an important asset of the Initiative. Potential teachers were firstly identified by the ITIs from their faculty based on a competence profile defined by the SFIVET experts.<sup>66</sup> They were then selected through an interview process conducted by the SFIVET or by SkillSonics based on the following criteria:

- Presentation and communication skills
- Methods of teaching
- Interactions with students
- Relevant subjects
- Connecting theory and practice
- Self-learning and improvement

According to the interview partners, the processes of recruiting instructors and teachers seem to have been generally suitable.<sup>67</sup> However, in order to increase the overall quality of instructors and teachers, specific competence profiles for SVETII teachers, instructors, and mastertrainers are currently being developed by the SFIVET.

### Training of instructors, teachers, examiners and mastertrainers

The training of instructors and teachers was and is an important element in assuring an effective transfer of knowledge. Between July 2009 and March 2013, 73 instructors, 79 teachers, and 38 examiners were trained in the framework of the Pilot Project.<sup>68</sup> In addition, 8 mastertrainers, mostly members of the SkillSonics team, were taught to train teachers and instructors. In the future, additional instructors will be qualified as mastertrainers with the aim to conduct trainings for new teachers as well as instructors. The table and the figure below show to what extent the targets set for the Pilot Project regarding teachers, instructors, and examiners were met:

Targets	2009	2010-2011	2012-2013
Achievements	2009-2011 (pilot phase)		Until spring 2013 (pilot closure)
<b>Teachers</b>	--	Increase from 16 to about 40	Depending on the number of trainees and involved ITIs
	57 teachers were trained until end of 2011 <sup>69</sup>		65 teachers were trained until end of 2012 79 teachers were trained until March 2013 64 teachers <sup>70</sup> on the list of teachers* in January 2013
<b>Instructors</b>	To be defined by partner companies	Increase decided by companies	To be decided by participating companies
	43 instructors were trained until end of 2011 <sup>71</sup>		53 instructors were trained until end of 2012 73 instructors were trained until March 2013 48 instructors <sup>72</sup> on the list of instructors* in January 2013

<sup>66</sup> SICC (29.09.2009, p. 11)

<sup>67</sup> Furthermore, the SFIVET got a good impression based on its assessments in terms of didactic methodology/ pedagogics conducted by a group of Swiss instructors in 2012.

<sup>68</sup> Other statistics provided by SkillSonics show that not all of these instructors and teachers are actively involved in the training, while some active teachers never participated in SVETII training.

<sup>69</sup> Incl. 2 members of the SkillSonics team and 1 employee of ABB Ltd. Bangalore

<sup>70</sup> Whereof 4 teachers did not seem to participate in any of the trainings; 2 trained teachers are not part of this list.

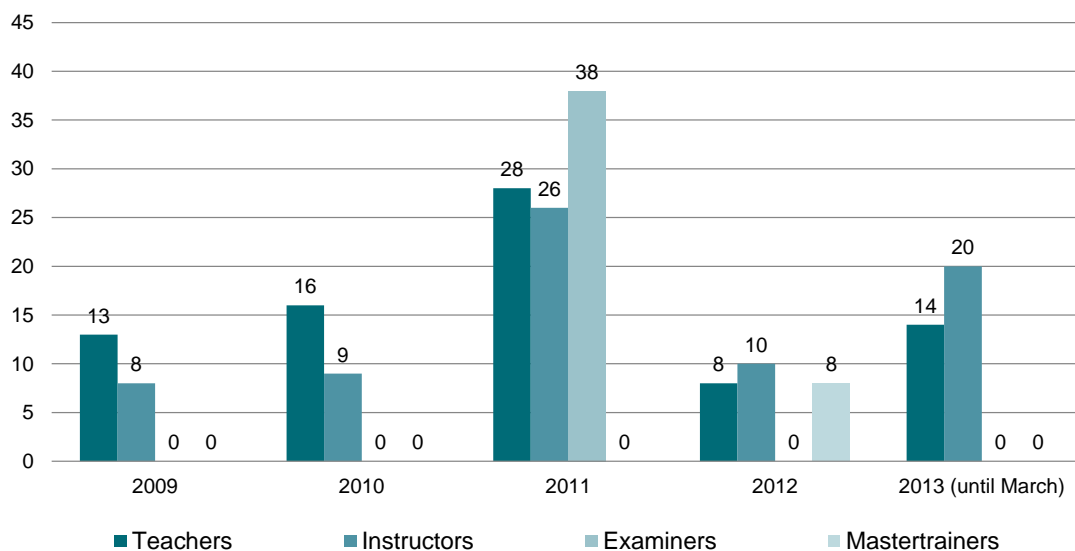
<sup>71</sup> Incl. 2 members of the SkillSonics team

Targets	2009	2010-2011	2012-2013
Achievements	2009-2011 (pilot phase)		Until spring 2013 (pilot closure)
Examiners	--	Prepare and implement examiners training and examinations	Ca. 15 examiners per year
	38 examiners <sup>73</sup> were trained until end of 2011		21 examiners are on the final list of examiners* (Jan. 2013) (no more examiners trained until March 2013)

Table 9: Targets and achievements regarding teachers, instructors and examiners as of March 2013; \*list of all teachers, instructors and examiner available for the SVETII programme provided by SkillSonics (sources: contribution requests, project reports, compilations provided by SkillSonics and interviews)

The following figure illustrates the number of teachers, instructors, examiners, and mastertrainers trained within the Pilot Project from 2009 until March 2013:

### Teachers, Instructors, Examiners and Mastertrainers



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Figure 9: Number of teachers, instructors, examiners, and mastertrainers trained within the SVETII Pilot Project per year (sources: contribution requests, project reports, compilations provided by SkillSonics and interviews in India; March 2013)

The content of these trainings was developed on the basis of needs identified by the feasibility study as well as by experts and on education courses offered for instructors in Switzerland:<sup>74</sup>

- *Teachers*: Teachers had to be familiarised with the new teaching material and at the same time their knowledge and knowhow regarding coaching methods supporting students' activity and responsibility had to be enhanced. In general, ITI teachers show

<sup>72</sup> 2 trained instructors left the company and 1 trained instructor is working for a company not yet participating.

<sup>73</sup> Incl. 28 instructors from companies, 4 teachers from ITIs and 6 members of the SkillSonics team

<sup>74</sup> SICC (29.09.2009, p. 11ff.); Nydegger, Tanner (03.09.2009; 04.10.2010)

high commitment and benefit from in-depth theoretical training in their field of expertise. However, they are not experienced in new teaching methodologies<sup>75</sup> and their English skills may be limited. Moreover, most of them lack practical professional experience. Furthermore, their ability to plan and prepare lessons as well as teaching material had to be improved. In the interviews, they recalled difficulties regarding implementing the syllabus when they first started with the SVETII training since they were not used to preparing their classes without a complete set of material, including semester planning, books, worksheets, tests, etc..

- *Instructors:* Instructors often offer broad professional experience, but at the same time little knowledge and knowhow regarding teaching and mentoring. Moreover, the groups of instructors were generally very heterogeneous. The main objective of the course was to teach the instructors how to increase their trainings' effectiveness by considering individual needs of the trainees. The content of the course was described as follows: «Therefore, the course was a mix among theoretical input, delivered by the course leader, single and group work, presentations by the participants and feedback from participants as well as from the course leaders. Very important was to reflect passed sequences alone, in groups or in the plenum» (Nydegger, Tanner 04.10.2010, p. 3). Throughout the Pilot Project, Swiss experts identified a lack of technical knowledge within the group of SVETII instructors. Companies often selected instructors known as experienced and responsible workers, but they did not necessarily have the basic theoretical and technical knowledge required.

The content of these 1-week-trainings is summarised in the table below. Detailed information about the trainings can be found in annexe A-5.

Group	Content of the training
73 instructors	Swiss VET System
	Situation oriented training & teaching
	How to build successful instruction
	Communication skills
	6 steps model for work methodology (IPERCA)
	Structure of qualification and assessment process
79 teachers	Swiss VET System
	Situation oriented training & teaching
	Preparing a learning unit based on the theory of CoRe (Competence Resource) model
	Methods to increase self-responding learning
	Basics of cooperative teaching
	Structure of qualification and assessment process
38 examiners	Purpose of the Examination
	Introduction to Examiners
	Mandate for Examiners
	Assessment Overview
8 mastertrainers	Basics of CoRe
	Didactics

<sup>75</sup> Teachers with an engineering degree never had to undergo training in pedagogic, didactic and teaching methods and therefore showed very poor knowledge of teaching methodologies.

Group	Content of the training
	Testing
	Heterogeneity
	Conflicts
	Communication
	AVIVA Model

Table 10: Content of the trainings for instructors, teachers, examiners, and mastertrainers taking place within the SVETII Pilot Project

In addition to the trainings, teachers and instructors got support from Swiss experts with regards to the planning and preparation of their task.<sup>76</sup> At the beginning, SVETII trainings for teachers and instructors were conducted by experts from SFIVET. Since 2012, the course coordinators from SkillSonics offer the course with material provided by SFIVET. After completing the training, participants receive a SFIVET certificate.

#### *Appreciation of the training of teachers, instructors, examiners and mastertrainers*

According to statements made by teachers and instructors, the training prepared them sufficiently for their new task within the SVETII Pilot Project.

Teachers and instructors mentioned that they especially benefited from exercises which allowed them to implement their new knowledge. As a consequence, they felt competent to apply the new teaching methodology. They particularly appreciated the enhanced interactivity of teaching supported by the new material and reported that SVETII trainees are enabled to develop new working approaches and self-confidence. This was confirmed by other stakeholders. Most teachers use the new methods and material also for their regular ITI classes.

Some teachers would have appreciated longer trainings (i.e. for particular subjects or learning techniques) or a regular follow-up. This demand was acknowledged by the mastertrainers recommending an additional training during the first week of the semester. Such two day training could focus on the assessments and provide a refresher programme as well as question time regarding the contents of the first part of the course. In addition, some examiners seem to be unconfident with respect to the assessment of skills.<sup>77</sup> This was confirmed by a Swiss expert observing the final examination: Examiners need better instructions regarding the assessment of the candidates, he concludes.<sup>78</sup> Many teachers expressed their interest in an enhanced communication within the Initiative. They appreciated the evaluation as an opportunity to share their experience as well as to express their feedback. As additional support from the Initiative, teachers expressed the wish to get first-hand experience of vocational education and training in

<sup>76</sup> SICC (29.09.2009, p. 11ff.); Nydegger, Tanner (03.09.2009)

<sup>77</sup> In addition, some examiners did not show up for the second final assessments in 2012.

<sup>78</sup> Zürcher (06.11.2012, p. 4)



Switzerland. Moreover, teachers offering their lessons at companies asked for laptops as well as higher allowances<sup>79</sup> taking into account long commuting distances.

Also some instructors expressed the wish to get first-hand experience regarding vocational education and training in Switzerland. They would appreciate periodical inputs from (Swiss) experts. However, most instructors are able to find support within their (Swiss) company, if needed. In many companies, internal and external experts are appointed for specific lessons as instructors might not be experts for all subjects offered by the programme.

Some instructors responsible for managing the programme within their company would appreciate more support respecting their coordination task since this is not part of their training. This also applies to the task of setting up the training infrastructures. They also asked for more support from SkillSonics regarding the availability of teachers and the marketing of the Initiative.<sup>80</sup>

### 3.3 SVETII Trainees and Diploma Holders

#### *Recruitment of SVETII trainees*

Following business customs in India, the companies generally<sup>81</sup> visit selected ITIs in order to introduce the Initiative and to take written tests and oral interviews for the recruitment of SVETII trainees. According to our investigations, the requirements varied from company to company. Most companies focus on recruiting SVETII trainees with a rural background because of their motivation to learn as well as their willingness to work hard and to stay on. Partner companies often consider it as a social responsibility to give «needy ones» a training and job opportunity. For some companies, skills and competences of potential SVETII trainees seem to be less important than their personality and enthusiasm.

The fact that most SVETII trainees finally manage to follow the programme, to pass the exams, and to satisfy their supervisors by the quality of their work can be taken as an indicator for the adequacy of the selection process of SVETII trainees. Hence, SVETII trainees show the level of competences and characteristics needed in order to successfully master the programme. Interview partners pointed to the importance of the SVETII trainees' basic knowledge which was acquired during ITI training. So far, few dropouts have been reported – and these mostly at the beginning of the training and often based on personal/ family reasons.

SVETII trainees within the Pilot Project were all men of similar age, comparable educational background and work experience. In other words:

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<sup>79</sup> While some SVETII teachers directly receive their allowances (i.e. travel expenses) from the companies, other teachers receive allowances through their ITI which keeps about 20% for administration costs.

<sup>80</sup> However, they seemed to be aware of the fact that the Initiative was also new to SkillSonics and its employees had to undergo a learning process as well, enabled by Swiss experts.

<sup>81</sup> Some companies placed ads on newspapers or selected SVETII trainees from their own pool of apprentices.

- Up to now all SVETII trainees were men.
- Most of them were around 20 years old.
- The majority had a rural background.
- All of them went to school for 10-12 years and completed two years of ITI basic training in the fields of fitting, welding, turning, machinist or electrical.
- They usually did not have any professional experience.

One company recruits SVETII trainees from its workforce: These trainees already have a few years of professional experience and thus are also a little bit older (21-22 years old).

#### *Numbers of SVETII trainees*

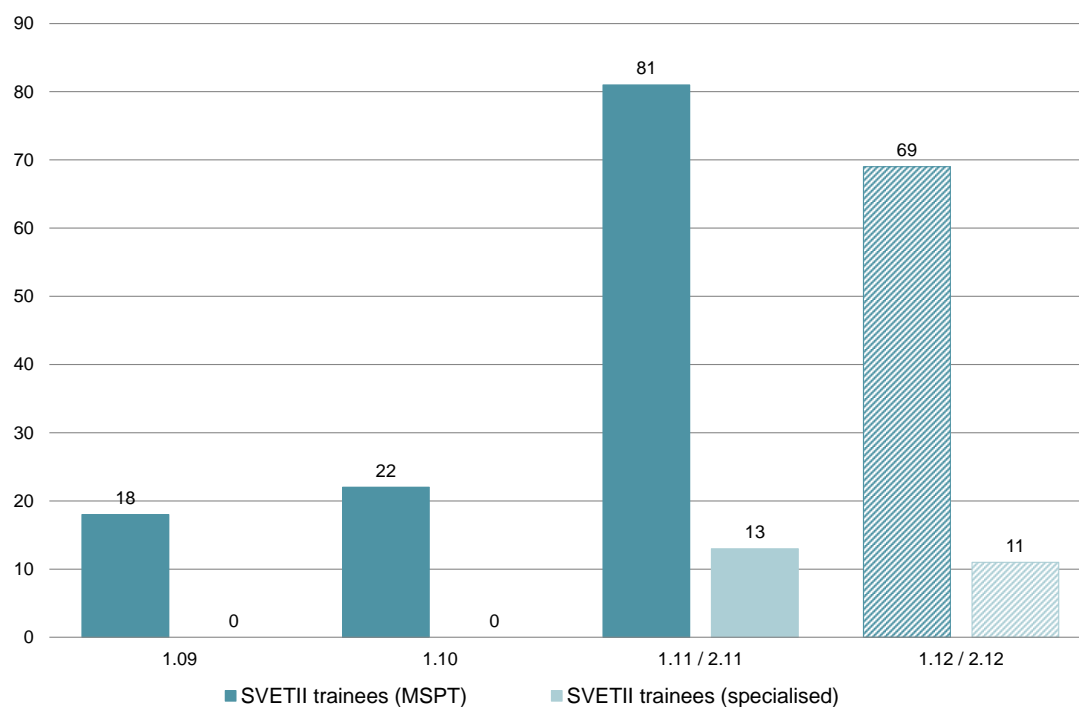
The funding requests submitted to the OPET/ SERI provided concrete targets regarding partner companies and SVETII trainees to be achieved by the Pilot Project. Neither the target set regarding partner companies nor the targets regarding the numbers of SVETII trainees have been achieved yet – as shown in the table below.

Targets	2009	2010-2011	2012-2013
<b>Achievements</b>	<b>2009-2011 (pilot phase)</b>		<b>Until spring 2013 (pilot closure)</b>
<b>SVETII trainees</b>	10-20 SVETII trainees per company; 80 SVETII trainees per year; 2009-2013: total of 250 trainees in 4-5 classes	Increase from 25 to 250 trainees (all cohorts)	2012: ca. 130 trainees 2013: ca. 105 trainees
	121 MSPT trainees are / were trained within the SVETII Pilot Project: – MSPT batch 1.09: 18 (passed) – MSPT batch 1.10: 22 (passed) – MSPT batch 1.11: 81 (in progress)  In addition, specialised SVETII programmes were introduced in 2011: – Specialised batch 2.11: 13 (passed)		In 2012, another 80 SVETII trainees started the MSPT and specialised programmes, no longer belonging to the Pilot Project: – MSPT-batch 1.12: 69 (in progress) – Specialised batch 2.12: 11 (in progress)

Table 11: Targets and achievements regarding SVETII trainees within the Pilot Project as of March 2013 (sources: compilations by Skillsonics, contribution requests, project reports, and interviews in India; the numbers of SVETII trainees/diploma holders differ slightly from figures provided by partners companies)

The following figure illustrates the number of trainees entering the SVETII programme between 2009 and 2011 (Pilot Project) and in addition the ones starting in 2012 (not belonging to the Pilot Project anymore).

### SVETII Trainees/ Diploma Holders per Batch



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Figure 10: Number of SVETII trainees per batch (sources: contribution requests, project reports, compilations provided by SkillSonic; March 2013)

There are a couple of reasons why the quantitative targets set for the Pilot Project were not met. Firstly, the number of Swiss companies interested in the specific profile of the training (2-year-MSPT) was limited. Secondly, two partner companies postponed the implementation of their SVETII programmes.<sup>82</sup> Thirdly, some partner companies were not able to recruit as many SVETII trainees as planned due to the following circumstances:

- ITI graduates have various options offered by other high profile companies.
- Some ITI graduates prefer the one year Indian apprenticeship in order to earn money faster or to continue to further education within the Indian educational system.
- The awareness level regarding the Initiative is not yet sufficient.
- The SVETII diploma is not recognised by the Indian government.
- Working in the manufacturing sector is generally not highly valued by Indian society.
- The company premises might not be located close enough to parents' homes.

Most SVETII trainees had not been exposed to urban or industrial traditions before. Already joining an ITI had been a big step and the requirements of the SVETII programme regarding quality, discipline, self-reliance, and commitment are challenging.

Given the importance Indians pay to family recognition, it has proven to be decisive to address parents of potential trainees as well and to convince them of the value and benefits of such an additional training.<sup>83</sup>

<sup>82</sup> ACC Limited started only in 2012, Nestlé has not yet started – due to various and mainly company-related reasons.

<sup>83</sup> The challenges concerning the recruitment of the trainees by the companies were described in the previous chapter.

### *Recurrent challenges regarding the training of SVETII trainees*

SVETII trainees start the training with differing sets of skills and competences and thus need more or less support. As a consequence of different entry skills,<sup>84</sup> the programme seems to be very demanding for some of the SVETII trainees. Especially the starting phase of the training has been considered tough by many SVETII trainees. In addition, the Initiative had to consider cultural differences: In India, apprentices would be hesitant to ask questions, criticise or give feedbacks to teachers or instructors. At the same time, teachers and instructors are not familiar with methods of interactive teaching or active demonstrations.

Moreover, particular emphasis has to be given to the fact that SVETII trainees start their training with poor English knowledge since their education and training mainly took place in their local language; their second language being Hindi. This makes it difficult in the beginning for most SVETII trainees to understand the technical language provided by the training material and thus to follow the programme. Teachers and instructors therefore offer translation into local language.

Taken together, the theoretical as well as the practical trainings have to bridge a large gap in order to address the young ITI graduates and at the same time achieve the quality standards set by the Initiative. SVETII teachers, instructors, and trainees face the challenge of fundamentally changing their teaching and learning approaches.

In addition the following organisational challenges were mentioned:

- *Theoretical teaching:* Time management as well as the availability and reliability of teachers facing multiple assignments has been considered as a recurring challenge – particularly taking into account the long commuting distances between companies and ITIs. The fact that ITIs are generally understaffed increases this problem and implies that there is not much choice regarding the selection of SVETII teachers. Moreover, the Initiative faces the risk of teachers being transferred to other ITIs as part of their public service.
- *Practical training:* It was not always easy for partner companies to find qualified and motivated instructors within their work force. All the more because the subjects of the broad MSPT programme require a broad expertise. Furthermore, time management of instructors facing multiple responsibilities has been mentioned as posing a remarkable challenge. Moreover, instructors face the challenge of coordinating and attuning the practical and theoretical part of the training. In addition, the need for specialised instructors and machines implies considerable investments by partner companies.
- *Final assessments:* The Swiss expert observing the final assessments in 2011 and 2012 stressed the fact that the quality and organisation of the practical exams still need to be improved. Especially the availability and reliability of the examiners, the coordination of the training material and syllabus, and the condition of machines and tools seems to be a constraint – even more, if a substantial scaling up of the Initiative

<sup>84</sup> Depending on the quality of the education at the ITI as well as on their specialisation

is envisaged. Moreover, SVETII-theory assessments were new to SVETII trainees, teachers, and instructors, since open book exams as well as multiple-choice questions are not applied at ITIs.

A lot of interaction took place in order to develop the content and the structure of the SVETII programme step by step, taking into account particular needs and sharing the experience made. SkillSonics mentioned their regular visits to partner companies in order to collect feedback from the trainees and support the instructors («supporter days»).



## 4 Impact and Outcome of the Pilot Project

### 4.1 Competences and Perspectives of SVETII Diploma Holders

As reported by partner companies, teachers, and instructors, SVETII diploma holders clearly show enhanced professional competences and increased productivity. The competences acquired go beyond technical knowhow and skills and include soft skills like self-confidence and self-responsibility. According to statements made particularly by instructors, quality and safety awareness, cleanliness, discipline, structured work approaches, task-oriented approaches, teamwork, and communication skills are specific competences acquired by SVETII trainees. Thus, SVETII diploma holders are well prepared for their job. Moreover, the particular multi-skilled profile (MSPT) enables them to work in different fields of manufacturing and to handle more complex situations. Thus, the particular MSPT profile also broadens their professional options.<sup>85</sup> Moreover, SVETII diploma holders are well prepared to continue their formation, since their skills as well as their confidence have been strengthened. The Initiative does not only train them, but also teaches them how to learn and to make use of training material and books self-reliantly. Some experts, however, underlined the importance of offering SVETII trainees more opportunities to work on the shop floor in order to get used to the challenges of producing under market conditions.

The following figure illustrates the impact of the SVETII programme on the trainees:

#### Impact on the Competences of SVETII trainees

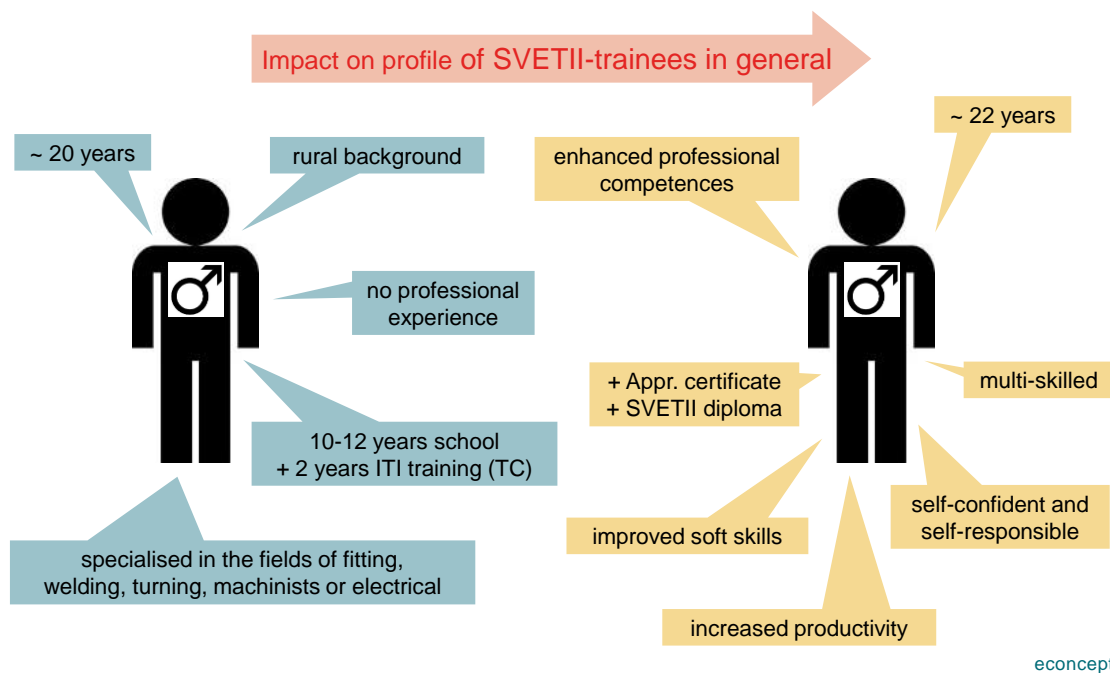


Figure 11: Profile of SVETII trainees before and after completing the SVETII programme

<sup>85</sup> The career of the diploma holders on the long run can of course not yet be assessed.

Up to now, the companies were happy to retain most of the SVETII diploma holders. However, they now face a new challenge of deploying them according to their enhanced skills and performance, but also consistent with the hierarchy of other co-workers. Some companies appoint the SVETII diploma holders immediately to somewhat higher positions, whereas others keep them as workers/ operators in order to foster the quality of the production. An influence of SVETII diploma holders on other co-workers performance has already been noticed by some companies.<sup>86</sup> To what degree this will also be reflected in the salaries of SVETII trainees/ diploma holders cannot be answered by this evaluation since they do not yet have any professional experience.

SVETII trainees benefited to a large extent from the trainings offered. The high quality of the training material, the interactive teaching as well as the dual approach to vocational education and training, combining both theoretical teaching and practical instructions are the most important aspects creating this positive impact of the Pilot Project. Interview partners would recommend the SVETII programme to other companies, teachers, and potential trainees.

## 4.2 Perception and Acceptance of the Pilot Project

Stakeholders value the Pilot Project, its capacity building approach, as well as the Swiss dual VET model – particularly since the SVETII programme meets the requirements of the industry and delivers concrete results. The following aspects have been mentioned as being particularly important:

- *Set-up of the training:* Training and training material have been described as well-structured and of high quality. Moreover, the fact that the Initiative pays particular attention to high quality and precision has been valued since global markets require this level of quality. However, the (technical) English used in the training material of the Pilot Project has been described as too demanding for many SVETII trainees. Some teachers and instructors have asked for a translation into their local language.
- *Dual approach:* Combining both practical instruction and theoretical teaching has been perceived as a successful approach to vocational education and training. Especially the high amount of practical training along with the direct exposure to industrial production is highly valued by the stakeholders of the Pilot Project. The challenge is to attune the theoretical and practical training.
- *Soft skills:* The interactive teaching is valued as a successful approach to enhance skills and solution-oriented competences. The interactive teaching methodology fosters the soft skills of the SVETII trainees – and thereby particularly their ability to communicate and to work in teams as well as their self-confidence and responsibility.

<sup>86</sup> The following additional indicators could be used to monitor the success of the training: number of SVETII diploma holders being retained/ dismissed by the companies: number of recruited SVETII trainees for the Pilot Project/ number of companies joining the Pilot Project. However, the evolution of these indicators will not only depend on the success of the training provided by the Initiative but also on general economic trends, specific market developments, on the performance of the companies and on labour law requirements.



- *Multi-skilled*: The MSPT profile is appreciated, since it offers broader working options within the partner companies and beyond.

The fact that the approval of the Initiative by the Indian Government as well as the recognition of the diploma provided by the Initiative are missing has been mentioned as a major problem. Moreover, running costs linked to the training have been indicated by partner companies as a constraint – for themselves as well as in view of convincing other companies to join. In addition, Indian labour law requires an indeterminate contract after more than one year of employment. Since the training provided by the Pilot Project takes two years, companies are obliged to offer an indeterminate contract to the trainees already in the second year of their training. This has been mentioned by some interview partners as a potential obstacle for companies to join the Initiative.

As far as we could experience, the Pilot Project was well accepted by all stakeholders. Nonetheless, the visibility of the Initiative is still limited.

### Summary

The table below specifies the appreciation of important elements of the Initiative from various stakeholders' point of view.

Stakeholders	Positive aspects of the Initiative	Problems regarding the Initiative
Companies	<ul style="list-style-type: none"> <li>– Dual approach to VET</li> <li>– Competence based approach to VET</li> <li>– Multi-skilled approach to VET</li> <li>– Coherent structure of the education and training</li> <li>– Enhanced skills of SVETII diploma holders including soft skills</li> </ul>	<ul style="list-style-type: none"> <li>– Missing recognition of the SVETII diploma by the Indian Government and Industry</li> <li>– (Running) Costs</li> <li>– Compatibility with Indian labour law</li> <li>– Challenge of recruiting SVETII trainees</li> <li>– Availability of instructors and teachers</li> </ul>
SVETII trainees	<ul style="list-style-type: none"> <li>– Quality of the training</li> <li>– Quality of the teaching and training material</li> <li>– Multi-skilled approach including soft skills</li> <li>– Future professional perspectives</li> </ul>	<ul style="list-style-type: none"> <li>– (Technical) English skills required</li> <li>– Missing recognition of the SVETII diploma by the Indian Government</li> <li>– Missing recognition of the SVETII diploma by other companies</li> </ul>
Instructors	<ul style="list-style-type: none"> <li>– Their own training</li> <li>– Additional professional opportunity</li> <li>– Dual approach to VET</li> <li>– Competence based approach to VET</li> <li>– Multi-skilled approach to VET</li> <li>– Coherent structure of the education and training</li> <li>– Quality of the training material</li> </ul>	<ul style="list-style-type: none"> <li>– (Technical) English skills required</li> <li>– Time management regarding multiple tasks</li> <li>– Alignment of theoretical and practical training</li> </ul>
Teachers	<ul style="list-style-type: none"> <li>– Their own training</li> <li>– New teaching methodology</li> <li>– Competence based approach to VET</li> <li>– Multi-skilled approach to VET</li> <li>– Quality of the teaching material</li> <li>– Opportunity to work with companies</li> <li>– Additional income</li> </ul>	<ul style="list-style-type: none"> <li>– (Technical) English skills</li> <li>– Commuting distances to companies</li> <li>– Only theory – no practical – teaching</li> <li>– Time management regarding multiple assignments</li> </ul>
ITIs	<ul style="list-style-type: none"> <li>– New teaching methodology and material used also for ITI courses</li> </ul>	<ul style="list-style-type: none"> <li>– Missing MOU with the DET</li> <li>– General shortage of teachers</li> </ul>
DETs	<ul style="list-style-type: none"> <li>– Contribution to the education challenge of India</li> </ul>	

Table 12: Particular appreciations by stakeholders of the SVETII Pilot Project

### 4.3 Effects of the Pilot Project in India

India is facing the challenge to assure training and education for 500 million young people until 2025. In this context, particular attention will have to be given to vocational education and training in order to strengthen the productivity and competitiveness of the Indian industry. In order to cope with this enormous challenge the Indian government strongly relies on private initiatives and is interested in training models from various countries. As many other vocational education and training projects launched in India by other countries or by large companies, the Initiative contributes to addressing these increasing educational needs.<sup>87</sup>

Particular importance can be given to the multi-skilled approach and the soft-skills of the SVETII trainees strengthened by the Initiative. Furthermore, the SVETII diploma holders are well prepared for the labour market and able to deliver high quality work. This fostered the visibility of the Swiss VET system as well as of Switzerland as reliable partner in India. In general, the stakeholders of the Pilot Project seem to be very satisfied with the SVETII programme. Since it has met their expectations, they would recommend it to other companies, teachers or SVETII trainees.

The Initiative is not (yet) fully embedded in the Indian VET system. A major prerequisite would be the recognition of the SVETII diploma by the Indian Government. Interview partners confirmed that the missing recognition posed problems for SVETII diploma holders if they wanted to join public service or continue to public higher education. Nevertheless, the SVETII programme offers a valuable alternative to the Indian vocational education and training. Their basic vocational education and training, taking place at the ITIs, is based on outdated curricula and does not consider the needs, neither of the industry nor of the labour market. In addition, infrastructures and machines of local ITIs are often not up to date. This was confirmed in interviews with local companies and trade associations. Therefore, some interview partners assumed the Initiative may be interesting for other companies too, since the corporate sector may rather focus on the quality of the training than on governmental recognition.

The Pilot Project showed positive effects for SVETII trainees and partner companies. The Initiative can be considered as a supplement to the Indian vocational education and training system.

### 4.4 Effects of the Pilot Project in Switzerland

The effects of the Pilot Project in Switzerland are – at least up to now – mainly limited to the Swiss partners involved in the Pilot Project. Based on the interviews the following aspects can be identified as effects of the Initiative in Switzerland:

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<sup>87</sup> SICC (30.06.2011, p. 10)

- *Opportunity for new experiences:* The Swiss experts involved in the Pilot Project largely benefitted from new experience made. Insights into the Indian context broadened their perceptions and approaches to vocational education and training.
- *Perceptions:* Adapting the Initiative to the Indian context, the Swiss partners involved in the Pilot Project became aware of specific socio-cultural aspects – of India but also of Switzerland. According to interview partners Swiss ideas could not be transferred without adaptation. Concentrating on key objectives and expectations became vital. Thus, Swiss perceptions and approaches towards vocational education and training were reflected and further developed.
- *Impact analysis and research needs:* Building up a VET system from scratch in India disclosed the importance of thorough analyses regarding the impact of specific elements, provisions, and procedures within a VET system. Thus, particular research needs have been identified.
- *Appreciation of the Swiss VET system in Switzerland:* Implementing the Initiative in the Indian context made the partners value the traditional strengths of the Swiss VET system more strongly. The shared responsibility of the corporate sector, public authorities, and schools – usually taken for granted – gained new appreciation among Swiss partners involved in the Pilot Project. However, this lesson learnt has not been transferred to a broader audience in Switzerland so far.
- *Importance of qualification profiles:* By developing a new curriculum in a systematic way, the Swiss partners recognised the importance of clear qualification profiles based on a thorough assessment of the competences needed.
- *Switzerland's International Strategy on education, research, and innovation:* The Initiative contributes to the implementation of Switzerland's International Strategy on education, research, and innovation. The Initiative strengthens the tradition of Swiss-Indian co-operation with regards to education, research, and innovation by integrating the field of vocational education and training.

Developing and implementing the Pilot Project allowed Swiss partners involved to make and share new experiences and thus to reflect also on the Swiss VET system. These lessons learnt have not yet been presented to a broader audience.



## 5 Synthesis and Lessons Learnt

### 5.1 Three Sets of Benchmarks

The main aim of the Pilot Project was to proof whether a transfer of elements of systemic relevance to the Swiss VET system to India is possible («proof of concept»). Three sets of benchmarks were leading through the assessment of the Pilot Project:

Targets for the Pilot Project	Transfer of systemic elements	Objectives of the Initiative
Locations, partner companies	Strong corporate responsibility for VET	Promoting Swiss VET system abroad
Industrial Training Institutes	Combining theory and practice in a dual approach	Increasing the competitiveness of Swiss companies in India
Instructors, teachers, examiners	Competence-oriented teaching	Supporting Indian future professionals
SVETII trainees, programmes	VET partnership	Contributing to bilateral relations

Table 13: Particular appreciations by stakeholders of the Initiative

With regards to these benchmarks, the achievements of the pilot phase and pilot closure of the SVETII can be assessed as follows.

### 5.2 Achievements Regarding Targets for the Pilot Project

The funding requests submitted to the OPET/ SERI provided quantitative targets regarding locations, partner companies, ITI and SVETII trainees, but no quantitative targets regarding teachers and instructors. The achievements of the Pilot Project regarding these targets can be assessed as follows (details in chapter 3):

- *Locations*: 5 locations are currently included in the Initiative: Bangalore (Karnataka), Pune and Chandrapur (Maharashtra), Anand and Vadodara (Gujarat). This is one location more than initially planned.
- *Partner companies*: The objective set for 2010-11, namely to expand the Pilot Project to 40 partner companies has not been met. The request for 2012-13 reduced the number to 10 (Swiss) companies and 1-3 other companies. These targets have almost been met (8 Swiss, 1 German, 1 Indo-American)<sup>88</sup>.
- *ITI*: The number of ITIs involved has been outreached by the Pilot Project since 17 ITI are involved compared to 4-9 as planned. However, as no detailed and up-to-date information about the ITIs involved in the Initiative is available, the ITIs of teachers trained in the SVETII trainings are taken as approximate figure.
- *Teachers, instructors, examiners*: To our knowledge, teachers, instructors and examiners were recruited and trained according to the need of the programmes offered.

<sup>88</sup> Whereof 9 companies already started with the training.

*SVETII trainees, programmes:* The quantitative targets regarding the numbers of SVETII trainees have not been achieved yet. Firstly, the number of Swiss companies interested in the specific MSPT profile of the Pilot Project was limited. Secondly, two partner companies postponed the implementation of the programmes. Thirdly, some companies were not able to recruit as many SVETII trainees as planned. In addition to the 2-years MSPT programmes one company offers a 1-year programme. Moreover, specialised 1-year programmes (welding, electrical, machinist) have been introduced. Maybe the requirements of further companies (also other than Swiss) can only be met with more specialised programmes.<sup>89</sup>

The quantitative targets set regarding partner companies and SVETII trainees have not been met; the other targets have been met or outreached.

### 5.3 Achievements Regarding the Transfer of Systemic Elements

The Initiative followed the principle of transferring knowhow and responsibilities to the fullest extent possible from Swiss VET partners to partners in India. Hence, the Pilot Project was established as a public-private partnership. The organisational set-up reflected the needs of the Pilot Project and offered «quick wins». According to Swiss VET tradition, the Pilot Project is based on a strong responsibility of local companies for the training of their employees and the training is based on a competence-based approach of training and combines both practical training of employees «on the job» and theoretical instructions in the classroom. However, the Pilot Project has not yet been able to develop formal and sustainable ties among the VET partners including training institutes, trade-organisations, and authorities. SkillSonics as a private company assumes the function of bridging the gap between the partners and delivers many services that in Switzerland are provided by the Cantons. Of course, the visibility of the Initiative is still limited and does not yet reach far beyond the (mainly Swiss) partners involved. Thus, the Initiative has not yet proven to suit the demand of Indian companies as well. Interview partners though, believe the Initiative could.

The Pilot Project was able to prove that a transfer of systemic elements of the Swiss VET system to (Swiss) companies based in India is possible and that the dual approach of Swiss vocational education and training is also suitable in this context. Thus, the «proof of concept» was successful within a well-defined framework.

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<sup>89</sup> SICC (30.06.2011, p.7)

## 5.4 Achievements Regarding the Objectives of the Initiative

### *Promoting the Swiss VET system abroad*

The Initiative reflects all three priorities set by Switzerland's international strategy for education, research, and innovation.<sup>90</sup>

- *Priority 1 «Strengthening and broadening international networks»:*<sup>91</sup> Contributing to Swiss-Indian relations, the Initiative has the potential to foster and to broaden the international network of Switzerland concerning education, research, and innovation.
- *Priority 2 «Supporting the export of educational competences and the import of talents in order to strengthen Switzerland's economic position»:*<sup>92</sup> Transferring Swiss knowhow regarding vocational education and training to India may lead to additional foreign demand for Swiss expertise in vocational education and training. Thus, the Initiative contributes to the educational exports envisaged.
- *Priority 3 «Fostering international recognition»:*<sup>93</sup> The Initiative may contribute to promoting the Swiss VET system and thus Swiss excellence in education abroad.

The Pilot Project thus promoted Swiss quality as well as the reputation of Switzerland as reliable partner in vocational education and training in India.

### *Competitiveness of Swiss companies in India*

Partner companies benefitted from the vocational education and training provided by the Pilot Project. They expressed a clear support for the Initiative and welcomed the enhanced quality of SVETII diploma holders. Taking into account that we are looking at the pilot phase and pilot closure of an Initiative that started in 2008, it is not surprising that the number of SVETII diploma holders is still small – not only relative to the needs of India's vocational education and training system, but even regarding the overall workforce of partner companies. A critical mass of highly skilled SVETII diploma holders working on the shop floor and also as supervisors will be needed to change working cultures and thus to increase the quality of the output and to strengthen the productivity of the partner companies. This has not been achieved yet. Hence, the impact of the training on the companies' productivity still remains limited in terms of improving the quality of their output and an increase in productivity. However, studies show to what extent the net value is decisive for companies in view of investing in vocational education and training.<sup>94</sup>

In the long run, the Initiative has the potential to achieve the objective and to contribute to the competitiveness of the companies involved. The quality delivered and the productivity achieved by skilled workforce will be pivotal for (Swiss) companies based in India in order to face the demands of globally competitive markets.

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<sup>90</sup> Schweizerischer Bundesrat (2010)

<sup>91</sup> «Stärken und Erweitern der internationalen Vernetzung»

<sup>92</sup> «Unterstützen von Bildungsexport und Talentimport zur Stärkung des Standorts»

<sup>93</sup> «Fördern der internationalen Anerkennung»

<sup>94</sup> Strupler, Wolter et al. (2012)

### *Supporting Indian future professionals*

SVETII trainees strongly benefitted from the training offered by the Pilot Project. Their technical as well as their soft skills were strengthened and their professional perspectives improved. High quality training material, interactive ways of teaching as well as the dual approach to vocational education and training, combining theoretical teaching and practical instructions, were most important for this positive impact. In order to sustain this positive impact, SVETII diploma holders will have to be given a working environment that enables them to implement their knowledge and knowhow. Finally, the extensive training should also have an impact on their salaries compared to other workforce.

Up to now, the positive impact of the Pilot Project has been limited to a small number of Indian future professionals. This is due to the fact that the Pilot Project started only five years ago and has hitherto been limited to a small number of (Swiss) partner companies. According to the business plan of SkillSonics, a major up-scaling of the Initiative and its training offers is planned. And also the recognition of the Initiative by other than Swiss companies will be essential for the future career opportunities of the SVETII diploma holders. This has the potential to increase the number of Indian future professionals benefiting from high quality training and education. However, the Initiative will have to be attentive not to give in on quality while growing and extending the offer to other formats<sup>95</sup> and other professions.

The missing recognition of the diploma offered by the Initiative has to be mentioned as a problem. Governmental recognition of a diploma is needed to continue education within the Indian public education system and is also a precondition for diploma holders to join public service.

### *Contributing to bilateral relations*

The Initiative is based on the Swiss-Indian bilateral friendship agreement, signed by the two countries on August 14, 1948. Even though the Pilot Project is a relatively small project, it contributed positively to bilateral relations between Switzerland and India.

The Initiative has the potential to achieve the objectives set – provided that the quality of the offer can be sustained.

## **5.5 Sustainability of the Initiative**

In addition to the benchmarks discussed in the previous chapter, the Initiative plans to be sustainable in the long run through a self-supporting public-private business model. Thus, the Initiative will depend on a strong interest and commitment of companies along with the support of public authorities. The following aspects will be important for the sustainability of the Initiative.

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<sup>95</sup> Shorter courses as well as courses tailor-made to specific interests



### *Assuring the quality of the Initiative*

The Initiative represents the Swiss VET system as well as Swiss quality in general. This perception has been mentioned to be of utmost importance when approaching new (Swiss) companies. Assuring the quality of the training – including syllabus, organisation of the training and assessments, training material, training of teachers, instructors and examiners, monitoring and quality control – will be pivotal for a successful development of the Initiative. Companies and associations stressed the importance of a strong Swiss partner also for the future in order to support the Initiative vis-à-vis Indian authorities, but also to assure the quality of the training. Thus, the idea of developing a particular label assuring the «Swissness» and the quality of the training has been proposed.<sup>96</sup>

### *VET partnership*

The discussion regarding the sustainability of the Initiative has up to now primarily been focusing on its economic self-reliance as a private business model. Yet, other aspects should be taken into consideration as well when striving for sustainability of the Initiative. Particularly assuring the continuous transfer of systemic elements having been identified as systemic to the Swiss VET system will be important in order to sustain the quality standards set by the pilot phase of the Initiative and to deserve the connotation of being Swiss in the long run. However, the Initiative has not yet been able to develop sustainable ties among the VET partners in India including training institutes, trade-organisations, and authorities and SkillSonics as a private company still assumes the function of facilitating the cooperation of the partners.

### *Involvement of the private sector*

Partner companies being the most important stakeholders also from a financial point of view expressed their interest in further participating in the Initiative. Given the fact, that multinational companies all over the world face the challenge of recruiting qualified personnel in order to compete on global markets, interview partners assumed that the industrial sector in India including Indian companies could be interested in the MSPT programme and also in tailor-made programmes. Especially large and medium sized enterprises seem to be aware of their need to invest in capacity building and skill development.<sup>97</sup> Hence, the business plan of SkillSonics foresees a major scaling up as well as related marketing activities.<sup>98</sup> SkillSonics estimates that it will take 20'000-30'000 SVETII trainees starting every year in order to be successful in the long run. Investing in vocational education and training has to be recognised as a prerequisite for a high quality work force. It includes investing in infrastructures and personnel, sharing the running

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<sup>96</sup> SICC (30.06.2011, p. 27)

<sup>97</sup> At the same time, small companies seem not to be able to afford the investments needed and the running costs linked to the Initiative.

<sup>98</sup> SkillSonics is planning that 35'000 young people start their SVETII training in five years from now, spread over the different programmes (courses for existing employees, 1-year-programmes and 3-year-programmes for «freshers»). For their training, around 1'200 instructors, 700 teachers, and 400 SkillSonics staff will be needed. For 2022, at least 1 million trainees should get trained across India in different professions under the Swiss dual-track model.

costs of the training as well as the facilitating and coordinating activities of SkillSonics.<sup>99</sup> The Initiative will only become economically sustainable with a broader acceptance of the industry; this means motivating more companies to join. An expansion of the Initiative in terms of numbers of trainees along with the runtime of the trainings will allow for some economies. However, to what extent such economies of scale can be achieved will depend on the several aspects:

- Runtime of participation of a company involved in the Initiative (+)
- Integration of more trainees per batch in companies already involved (+)
- Involvement of more companies at existing locations (+)
- Integration of more ITIs as well as recruitment of private teachers (-)
- Implementation of elements of the Swiss VET system at more locations in India (-)

The integration of new partner companies – particularly at new locations – will lead to additional development costs. Every new company joining the Initiative will have to invest in infrastructures and in the training of instructors. At the same time, every new location will mean training new teachers from a new ITI or recruiting and training private teachers and ask for additional coordination efforts by SkillSonics and corresponding costs. The contribution of companies to SkillSonics will most likely be reduced per trainee while expanding the Initiative, since development costs for training material will be shared by more companies. However, coordination and infrastructure maintenance costs as well as salaries for teachers, instructors, and SVETII trainees will incur continuously.

Cost developments in partner companies (after the Pilot Project<sup>100</sup>) are schematically reflected in the next figure.

### Schematic Illustration of Cost Developments in Partner Companies (not to scale)

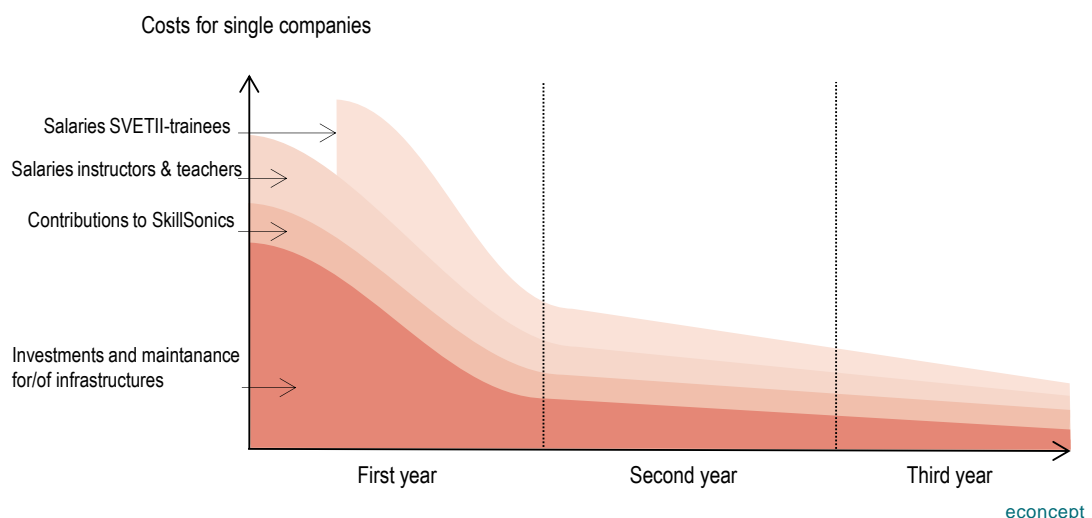


Figure 12: Schematic illustration of cost developments in partner companies

<sup>99</sup> Moreover, holding a SVETII diploma may also lead to an increased salary.

<sup>100</sup> During the Pilot Project no contributions to SkillSonics had to be paid by Swiss partner companies.

### *Involvement of public authorities and ITIs*

For the time being, it is still to be proven to what extent the Initiative will be successful in bringing the authorities back on board for new MOUs now that the pilot phase is over and the financial support by the Swiss Government gone. Therefore, the financial commitment of the National Skill Development Cooperation of India (NSDC) sets a strong signal: NSDC has given SkillSonics a soft loan and participates in the Initiative by taking equity since July 2013.<sup>101</sup> The Term Sheet says: «The sourcing and mobilization of apprentices is the combined responsibility of the State DETs, SkillSonics and the companies i.e. companies of SkillSonics.»<sup>102</sup> In addition, the approval of the Initiative and the recognition of the SVETII diploma by the Indian authorities and industry/ companies will be decisive to strengthen the profile of the Initiative:

- *Memorandum of Understanding (MOU)*: Signing new MOUs between representatives of the Initiative<sup>103</sup> and Indian state authorities will be crucial for the sustainable development of the Initiative. Drafts of such agreements have been submitted to the authorities by SkillSonics and preliminary discussions have taken place. However, the MOUs are still pending and several companies stressed that the official approval of the Initiative by the authorities will be important for a successful future. In this spirit, one company decided to retain a part of its financial contribution to SkillSonics until the new MOU is signed and another company did not start the training for the same reason. Ultimately, also the involvement of ITIs will depend on these MOUs since ITIs will otherwise not be able to make their teachers available for the training.
- *Recognition of the SVETII diploma*: The recognition of the diploma provided to the Initiative by the Indian Government will be an important step in view of integrating the Initiative into the Indian VET system. Without this recognition, SVETII diploma holders are neither admitted to further public education nor to public service.<sup>104</sup> However, independently of the recognition of the SVETII diploma by the authorities, the corporate sector may value the training provided by the Initiative.
- *Authorisation of apprenticeships*: In addition, governmental approval is also needed for companies in order to offer apprenticeships.

At the same time, attention has to be drawn to the fact that the organisational set-up of the Initiative is not attuned to the new guidelines issued by the Indian Government: On Mai 21, 2012, the Ministry of Labour & Employment, Directorate General of Employment & Training issued guidelines regarding the «Introduction of a Dual System of Training in Government and Private ITI(s)». These guidelines offer the ITIs the option to introduce a Dual System. Thereby, the practical training shall be conducted in the industry and theoretical training in the ITI, both strictly according to prescribed syllabi. In contrast to the SVETII Pilot Project, the trainees shall be on toll of the training institute even when work-

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<sup>101</sup> Expecting half a million trainees within 10 years

<sup>102</sup> Information by SkillSonics, October 12, 2013

<sup>103</sup> Presumably SkillSonics supported by a recommendation from Swiss authorities

<sup>104</sup> In India the public sector is of utmost importance with regards to safe employment conditions.

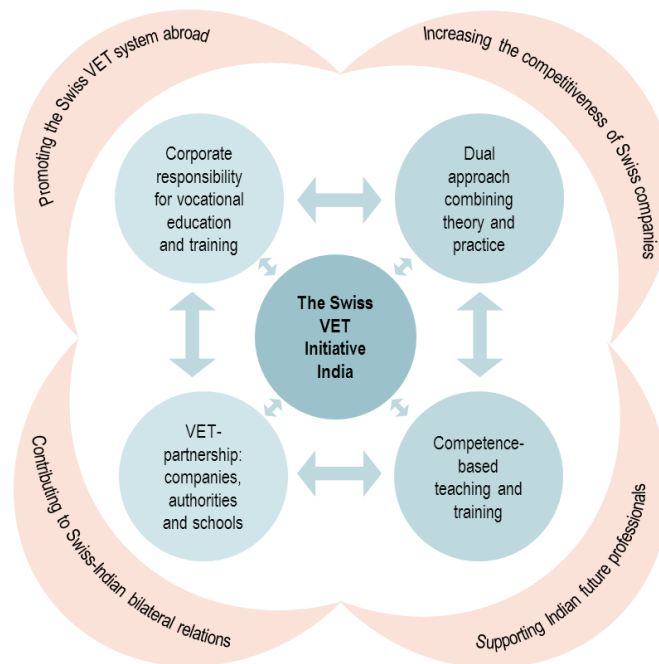
ing in the industry. The institute shall be the main custodian and job recruitment shall take place only after completion of the training (see annexe A-9).

Moreover, other countries<sup>105</sup> and also private companies are active in the development of vocational education and training programmes in India as well. The Indian Government shows a growing interest in vocational education and training and in VET models from other countries<sup>106</sup>. In view of this competition, the Initiative should not lose momentum.

### Summary

The Initiative follows specific objectives and has the ambition to transfer systemic elements of the Swiss VET system to India. Thus, the sustainability of the overall approach will only be achieved if all elements identified as being of systemic relevance are transferred in a coherent and sustainable way. This is illustrated in the figure below.

### Systemic Approach Embedded in the Overall Objectives of the Initiative



econcept

Figure 13: Systemic approach embedded in the overall objectives of the Initiative

Having proven that the Swiss VET approach suits Swiss companies also in the Indian context, working on the embedment of the Initiative within the VET system of India will now be decisive in order to achieve sustainability. Such efforts are clearly expected by partner companies.

<sup>105</sup> I.e. Germany, Australia

<sup>106</sup> Mujumdar (n.d.); Khanna (2012)

## 5.6 SWOT-Analysis of the Initiative

The following SWOT-analysis<sup>107</sup> may serve as a basis to assure the strengths of and to compensate for weaknesses of the Initiative. Moreover, the analysis may disclose opportunities and threats lying ahead. The SWOT-analysis looks at the Initiative and its approach in general and thus not only at activities of the Pilot Project. Based on this analysis, recommendations addressing specific issues and stakeholders as well as lessons learnt regarding the transfer of systemic elements of the Swiss VET system to other countries will be identified.

### Strengths and Weaknesses of the Initiative

Strengths of the Initiative	Weaknesses of the Initiative
<ul style="list-style-type: none"> <li>– <i>Quality</i>: The Initiative offers high quality training. The training is competence-based and includes new teaching methodologies fostering hard and soft skills in a multi-skilled approach. Hence, professional perspectives for Indians are broadened.</li> <li>– <i>Demand-orientation</i>: The Initiative is based on needs and requirements of (Swiss) companies.</li> <li>– <i>Building on the Indian educational system</i>: The programme builds on basic ITI training and also prepares the SVETII trainees for the Indian apprenticeship certificate.</li> <li>– <i>Capacity building</i>: The Initiative contributes to capacity building within partner companies (SVETII diploma holders and instructors) as well as in ITIs by increasing the competences of their teachers.</li> <li>– <i>Committed partners</i>: The Initiative can count on committed partners – in Switzerland and in India. SkillSonics played and still plays a decisive role in bridging the gap between partner companies, authorities, and ITIs.</li> </ul>	<ul style="list-style-type: none"> <li>– <i>Costs</i>: The Initiative requires relatively important investments by partner companies and also its running costs are high. Economies of scales will be limited, since every new company joining will have to invest and to bear running costs for salaries of instructors and SVETII trainees as well as for the maintenance of the infrastructures. An up-scaling will reduce the costs for the production of training material. At the same time, expanding the Initiative to further locations, companies and trades will also lead to additional fixed costs. The cost structure of the Initiative is complex and, while economies of scale are possible, they should not be overestimated.</li> <li>– <i>Missing governmental recognition</i>: The missing recognition of the SVETII diploma by the Indian Government<sup>108</sup> limits further educational perspectives of SVETII diploma holders and their options regarding joining the Indian public service.</li> <li>– <i>Fragile organisational set-up</i>: The Initiative faces the lack of an institutionalised VET-partnership of the corporate sector, public authorities, and schools in India that would be needed to assure a robust organisational set-up. Thus, the Initiative strongly relies on SkillSonics as a professional project management supported by Swissmem, SFIVET, and of late NSDC.</li> <li>– <i>Limited impact and visibility</i>: Since the Initiative only started some years ago, its impact with regards to trainees, professions, and companies along with its visibility beyond Swiss networks is still limited.</li> </ul>

Table 14: Strengths and Weaknesses of the Initiative

<sup>107</sup> SWOT = Strengths / Weaknesses / Opportunities / Threats

<sup>108</sup> As well as by the Swiss Government – although this recognition may not be relevant for most Diploma holders

## Opportunities for and Threats to the Initiative

Opportunities for the Initiative	Threats to Initiative
<ul style="list-style-type: none"> <li>– <i>Educational challenge</i>: In view of its growing young population, India is facing a huge educational challenge – with a specific focus on vocational education and training. The Indian Government shows a growing interest in vocational education and training and in VET models from other countries.</li> <li>– <i>Corporate demand for skilled workforce</i>: Globally competitive markets demand a skilled workforce also for companies based in India. Adapting the programmes to the demand of individual companies and thus diversifying the offer may be a realistic business option.<sup>109</sup></li> <li>– <i>Reputation of Swiss quality</i>: Switzerland and its VET system are known for high quality products. Emphasising this quality therefore will offer important opportunities for marketing the Initiative.</li> <li>– <i>Pilot project for Switzerland</i>: The Initiative may serve as a pilot project also in view of further promoting the Swiss VET System abroad.</li> <li>– <i>Economic developments</i>: The structural weakness of India's once robust economy may underline the importance of highly skilled workforce in order to be competitive.</li> </ul>	<ul style="list-style-type: none"> <li>– <i>Financial risks</i>: The Initiative faces financial risks as a consequence of the small audience addressed until now and the possible lack of companies prepared to bear the high costs of the training.</li> <li>– <i>Reduced attractiveness</i>: There will be a constant challenge of maintaining the quality of the programmes and respecting the elements identified as being key factors of the Swiss VET approach while growing and diversifying the offer (short courses, additional professions). Moreover, the missing recognition of the diploma provided by the Initiative may reduce the attractiveness for potential SVETII trainees.</li> <li>– <i>Economic developments</i>: The structural weakness of India's economy challenges companies and may reduce their potential to invest more in vocational education and training as well as the interest and possibilities of potential partner companies to the Initiative.</li> <li>– <i>Other offers</i>: Programmes for vocational education and training started by other countries or private institutions/ companies may imply a business competition if offering the same quality but with lower costs.</li> </ul>

Table 15: Opportunities and Threats for/to the Initiative

## 5.7 Recommendations Addressing Specific Issues and Stakeholders

The following table summarises some recommendations addressing specific issues and stakeholders of the Initiative. These recommendations are based on the results of the evaluation and the SWOT-analysis of the Initiative.

Stakeholders	Recommendations addressing specific issues and stakeholders
Companies	<ul style="list-style-type: none"> <li>– Ensure the quality of the training infrastructure</li> <li>– Select/ Appoint instructors having the potential and competences required</li> <li>– Allow instructors and training managers to invest enough time in their new responsibilities</li> <li>– Select students meeting the requirements for the SVETII programme</li> <li>– Convince parents and potential SVETII trainees of the added value of the training</li> <li>– Support SVETII trainees to also apply for the Indian apprenticeship certificate</li> <li>– Provide SVETII diploma holders with a working environment allowing them to apply their skills</li> </ul>
SkillSonics	<ul style="list-style-type: none"> <li>– Assure an efficient management and coordination of the Initiative in India and in Switzerland</li> <li>– Assure the quality of the Initiative by implementing an overall quality management system</li> <li>– Strengthen the training of teachers and instructors (refresher courses)</li> <li>– Make the technical English in the training material easier to understand</li> <li>– Further development of the training material</li> </ul>

<sup>109</sup> At the same time, diversifying the offer also bears risks.

Stakeholders	Recommendations addressing specific issues and stakeholders
	<ul style="list-style-type: none"> <li>– Ensure continuing adaptation of the curriculum to the needs of the industrial sector rather than of particular interests of specific companies</li> <li>– Ensure cooperation with ITIs and availability of suitable theory teachers</li> <li>– Work towards better embedment of the Initiative in the educational system of India</li> <li>– Strengthen the visibility of the Initiative</li> </ul>
SFIVET	<ul style="list-style-type: none"> <li>– Assure the standards set by the Swiss VET system especially with regards to the pedagogic training of mastertrainers, instructors, teachers, and examiners</li> <li>– Develop competence profiles for SVETII mastertrainers, teachers, and instructors regarding subject related capabilities in terms of method and pedagogy</li> </ul>
Swissmem	<ul style="list-style-type: none"> <li>– Assure the standards set by the Swiss VET system especially with regards to the curriculum and the technical training of mastertrainers, instructors, teachers and examiners, and regarding competency profiles and certifications</li> </ul>
SERI	<ul style="list-style-type: none"> <li>– Work towards a full implementation of a sustainable VET partnership</li> <li>– Investigations and discussions regarding a «Swiss label» for vocational education and training</li> </ul>

Table 16: Recommendations addressing specific issues and stakeholders

## 5.8 Lessons Learnt Regarding the Transfer of Systemic Elements

According to the evaluation of the Pilot Project, the following lessons can be learned regarding a further promotion of the Swiss VET system abroad.

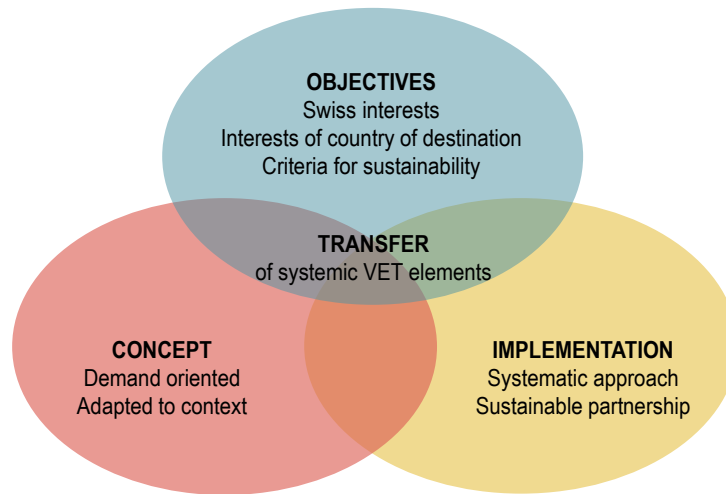
### *Objectives of transferring elements of the Swiss VET system to other countries*

The Pilot Project clearly focussed on Swiss companies based in India and on their particular needs regarding the quality of their work force and in view of an enhanced competitiveness. Promoting the Swiss VET system in other countries will not only mean adapting the concept and the implementation of the programme to a new education system and a different economic and socio-cultural context but will also imply a new discussion regarding short-term and long-term objectives of such an initiative. This discussion will have to address Swiss interests in the country of destination but also in Switzerland itself. Thus, it will have to be decided in a comprehensive way to what extent such an initiative should address objectives of development aid, of economic policies or of research, innovation, and education policies. In addition, the Pilot Project underlines the importance of thorough needs assessments and in-depth feasibility studies. Moreover, the requirements regarding sustainability will have to be clarified – addressing not only the economic self-reliance of a business-model but also assuring a sustainable implementation of elements identified as being of systemic relevance to the Swiss VET approach. Clearly defining short-term targets along with long-term objectives are important in order to achieve sustainability of such an initiative. Concepts of sustainability have to be designed and critically evaluated from the very beginning of an Initiative.

The figure below illustrates the need for a coherence of objectives, concept and implementation a further promotion of the Swiss VET system abroad.



## Coherence of Objectives, Concept and Implementation



econcept

Figure 14: Objectives, concept and implementation for a successful transfer of systemic VET elements

1. Every initiative aiming at transferring elements of systemic relevance to the Swiss VET system to another country will have to be redesigned regarding its objectives, concept and implementation strategy.
2. A clear demand expressed by potential partner companies as well as by public authorities in the country of destination will be pivotal.
3. Requirements regarding the sustainability of an initiative will have to be clearly defined.

### *Systemic approach adapted to specific context*

Transferring educational competences from Switzerland to other countries is not just about running training programmes in the countries of destination. A systemic approach is needed identifying and transferring relevant elements of a successful education and training system. With regards to dual-track vocational education and training, this means running high-quality programmes as well as building up a sustainable and institutionalised partnership of the corporate sector, of public authorities, and schools.

At the same time, there obviously is no «one-model-fits-all-solution» – neither for vocational training and education nor for the transfer of educational competences from Switzerland to other countries. A transfer of systemic elements of the Swiss VET system to other countries therefore has to take place in a flexible way with regards to local context and has to be able to adapt to specific socio-cultural aspects.<sup>110</sup> Identifying the soft skills relevant in a particular socio-cultural context will be essential.

<sup>110</sup>Euler (2013), Nederstigt, Mulder (n.d.).



4. A systemic approach combining the elements identified as being of systemic relevance for the Swiss VET system and adapting their implementation to the specific context is the promising way to a transfer of systemic elements of the Swiss VET system to other countries.

#### *Professional implementation*

Committed partners not only in Switzerland but even more in the country of destination are crucial. A strong local management partner is important in order to start and to drive such an initiative in a professional way. In the interest of the sustainability of such initiatives, a robust organisational set-up and embedment in the country of destination and in Switzerland is recommended. Moreover, the implementation of such an initiative starting from scratch and including various public and private stakeholders requires a systematic management and a thorough documentation of decisions made and measures taken. Moreover, the evaluation underlines that particular attention has to be paid to language skills of potential trainees, instructors, and teachers in the country of destination.

5. A professional management by a strong local partner is a precondition for successfully implementing such an initiative.
6. A robust organisation set-up is decisive in view of a sustainable development of such an initiative.
7. Particular attention has to be paid to language skills.



## Glossary

### Evaluation Terms

Effectiveness/ effective	Relates to the extent to which a measure induces change and has produced (or is likely to produce) the desired and/or desirable effects.
Efficacy/ efficient	Measure of how economically the resources (human, financial, material, etc.) are used to produce the desired results (outputs, impact, outcome).
Evaluation questions	Questions guiding a systematic evaluation of a project or an institution.
Impact	Effects on the <i>individual</i> (intended or unintended, positive or negative) resulting directly or indirectly from a project or measure.
Interview partners	General term for all persons included in the investigations which were carried out in the framework of the evaluation.
Outcome	Effects on the <i>company, economy or society</i> (intended or unintended, positive or negative) resulting directly or indirectly from a project or measure.
Output	Activities, goods, intellectual properties, and services directly produced in a project which can be measured quantitatively or qualitatively.
Sustainability	The long-term and self-reliant continuation of a project or of benefits and/or effects generated by a project or measure.

### Institutions/ Organisations

CII	The Confederation of Indian Industry (CII) is a non-government and non-profit member organisation with multinational corporations as well as small- and medium-sized businesses ( <a href="http://www.cii.in">http://www.cii.in</a> ).
DET/ DVET	The Directorate/Department of Employment & Training (DET/ DVET) is the public institution at state level in India responsible for developing and coordinating programmes related to vocational trades. Amongst other, it has the administrative and financial control over the Industrial Training Institutes (ITIs).
DGET	The Directorate General of Employment & Training (DGET), Ministry of Labour & Employment of the Government of India, is the apex organisation for development and coordination at national level for the programmes relating to vocational training ( <a href="http://dget.gov.in">http://dget.gov.in</a> ).
FICCI	Federation of Indian Chambers of Commerce and Industry (FICCI) is a non-government, not-for-profit organisation with members from the corporate sector ( <a href="http://www.ficci.com">http://www.ficci.com</a> ).
ITI	Industrial Training Institutes (ITIs) are government-run training organisations in India which provide post-school vocation-

al training in the technical field. They are subject to the Directorates of Employment and Training (DETs). Industrial Training Centres (ITCs) are privately run equivalents.

Nacks Ventures	Nacks Ventures is a profit-organisation based in India, providing services in i.e. Management Consulting, Angel Investment, Vocational Training and Education and Social Enterprises. Nacks Ventures had an essential role in the adaption of the Swiss VET Initiative to India and was responsible for managing and coordinating the Initiative in India (for SICC) before these tasks were taken over by SkillSonics (together with part of the Nacks Ventures team).
NCVT	The National Council for Vocational Training (NCTV) is the central authority to coordinate and structure the vocational education in India, which includes responsibilities such as the certification of trades and the determination of learning content, methodology, and duration of trainings ( <a href="http://www.tomorrowsfoundation.org">http://www.tomorrowsfoundation.org</a> ).
NSDC	The National Skills Development Corporation (NSDC) is a not-for-profit organisation that acts as a catalyst in skill development by providing funding to enterprises, companies, and organisations that offer skill training. It also develops appropriate models to enhance, support, and coordinate private sector initiatives ( <a href="http://nsdcindia.org">http://nsdcindia.org</a> ).
OPET	Federal Office for Professional Education and Technology ((OPET) until end of 2012; today State Secretariat for Education, Research and Innovation (SERI)).
SERI	The State Secretariat for Education, Research and Innovation ((SERI); former Federal Office for Professional Education and Technology (OPET)) in the Federal Department of Economic Affairs, Education and Research (EAER) is the federal government's specialised agency for national and international education, research, and innovation policies ( <a href="http://www.sbf.admin.ch">http://www.sbf.admin.ch</a> ).
SFIVET	The Swiss Federal Institute for Vocational Education and Training (SFIVET) is the Swiss governmental centre of competence for the provision of tertiary-level basic and continuing training to VET actors, for the development of professions and for VET research ( <a href="http://www.ehb-schweiz.ch/en">http://www.ehb-schweiz.ch/en</a> ).
SICC	The Swiss-Indian Chamber of Commerce (SICC) is a bi-national, private sector, non-profit association which arranges trade missions for Indian and Swiss companies interested in expanding into each other's markets and helps provide contacts and information for interested businesses ( <a href="http://www.sicc.ch">http://www.sicc.ch</a> ).
SkillSonics India Pvt. Ltd.	SkillSonics was founded to take over the management and coordination of the Swiss VET Initiative in India (in cooperation with the project partners) from Nacks Ventures. SkillSonics imparts global level skills to entry-level and existing technicians by bringing skills training programs to the Indian engineering sector ( <a href="http://www.skillsonics.com">http://www.skillsonics.com</a> ).

Swissmem	As an association (organisation of labour), Swissmem unites the Swiss electrical and mechanical engineering industries and associated technology-oriented sectors ( <a href="http://www.swissmem.ch/en.html">http://www.swissmem.ch/en.html</a> ).
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### Terms related to Vocational Education and/ or the Initiative

Apprentice/ apprenticeship	A young person undergoing an apprenticeship at a company based on the <i>Indian</i> VET leading to the certificate of the National Council of Vocational Training (NCVT).
AVIVA	A specific competence-oriented model for planning a teaching unit with five steps.
Competences	Clusters of abilities, domain-specific knowledge, skills, and attitudes enabling a person to master professional tasks.
Competence-based training	Competence-based training focuses on transmitting the type and level of competences required in a specific professional field. Learners acquire the competences (i.e. resources: abilities, knowledge, skills, and attitudes) to master professional tasks in theoretical and practical settings.
CoRe	Competence-Resource-Catalogue (CoRe) is a model of a curriculum development that describes professional activities and tasks to list the resources necessary to master them. The identified resources are to be built up in practical and school settings.
Corporate responsibility	Corporate responsibility within the Swiss VET system or after the Swiss VET model means that the companies are co-responsible for the vocational education and training of their apprentices in the case of Switzerland or their SVETII trainees in the case of India and show a strong involvement in this regard.
Dual-track approach	The dual-track approach to vocational education and training combines part-time practical training in a company with theoretical education in a vocational school at different times.
Examiner	Expert assessing SVETII trainees (knowledge and abilities).
Hard skills	Specific, teachable abilities and capabilities that can be defined and measured such as practical and theoretical skills; opposed to soft skills.
Instructor	Experts teaching the practical knowhow within the SVETII programme and responsible for the mentoring of the SVETII trainees at the companies.
IPERCA	The IPERCA model (Inform, Plan, Elect, Render, Cogitate, Assess) for work methodology provides a clear approach of 6 steps activities that have to be carried out to plan, structure, and cope with complex projects.
Mastertrainer	An expert who trains ITI teachers as well as company instructors within the SVETII programme.
MOU	A Memorandum of Understanding (MOU) is a legal document outlining the terms and details of an agreement between the signing organisations.

MSPT	The profile of the «Multi-Skilled-Production-Technician» (MSPT) was elaborated by selecting the main competences of the Swiss profession «EFZ Anlage- und Apparatebau» and adding elements of other professional fields (incl. poly-mechanics).
NAC	The National Apprenticeship Certificate (NAC) for employment under Government/ Semi-Government Departments/ Organisations is awarded by the National Council of Vocational Training (NCVT) to those who successfully completed an internship at a company based on the Indian VET system.
NTC	The National Trade Certificate (NTC) is awarded by the National Council of Vocational Training (NCVT) to those who successfully completed a specialised course between 6 months and 2 years after their training at the Industrial Training Institute (ITI). The NTC is recognised for recruitment to subordinate posts within India as well as abroad.
Partner company	Companies participating in the Swiss VET Initiative in India and thus offering vocational training programmes based on the Swiss VET model. Amongst other, they are responsible for the recruitment processes, practical training, training infrastructures, supervision of the SVETII trainees, payment of the teachers, provision of instructors, and management capacities.
Principal SVETII/ the Initiative	Executive authority of an Industrial Training Institute (ITI). The Swiss Vocational Education and Training Initiative India SVETII aims at introducing elements of the Swiss dual-track vocational education and training (VET) system in selected locations in India. Since the Initiative represents a co-operation of Switzerland and India, the Initiative might also be named Swiss-Indian Vocational Education and Training Initiative in some contexts.
SVETII diploma holder	Someone who has completed a dual-track vocational training/ education based on the Swiss VET model and in the framework of the Initiative between 2009 and 2013.
SVETII programme/ Swiss VET Initiative programme in India SVETII Pilot Project	Vocational education and training programme implemented in the framework of the Swiss VET Initiative in India and therefore based on key principles of the Swiss VET system. The Pilot Project started in the framework of the Swiss VET Initiative in India which includes the <i>pilot phase</i> as well as the <i>pilot closure</i> . The pilot phase covers the implementation of the Initiative during the first years (2009-2011) based on a feasibility study. At the end of 2011, the pilot phase was closed. Since two cohorts started their training during the pilot phase of the Initiative, subsidies were prolonged for another two years (pilot closure, 2012-2013) in order to complete these programmes and lead the project towards self-reliance.
SVETII trainee	A young person participating in a dual-track vocational training/ education within the SVETII, basically comparable to apprentices trained in Switzerland.

Soft skills	Personal and behavioural attributes that do not depend on acquired knowledge; i.e. the ability to take on responsibility, to reflect someone's own thoughts and actions, facility with language, personal habits, and interpersonal competences, opposed to hard skills.
Stakeholder	Agencies, organizations, groups or individuals with direct or indirect stake (interest) or investment in the design, implementation, benefits of a public measure, i.e. the partner companies, ITIs, instructors, teachers, SVETII trainees, etc. of the Swiss VET Initiative.
Syllabus	An outline and summary of topics to be covered during the vocational training including its objectives, prerequisites, evaluation scheme, and material to be used.
Systemic transfer	Systemic transfer concerns the transfer of basic and thus «systemic» elements of the Swiss VET system to India and aims at adopting them to the cultural, social, and economic frameworks existing in India.
Teacher	Someone teaching the theoretical training/ theory classes within the Swiss VET programme.
Teaching methodology	Teaching methodologies comprise the principles and methods used by instructors and teachers to carry out the training.
Training manager/ VET coordinator	The training manager/VET coordinator at a partner company is in charge of the implementation and coordination of the SVETII programmes. He/she is responsible for the SVETII trainees and works closely with instructors and other stakeholders in the planning and execution of the training.
Vocational Education and Training (VET)	VET is an education or training providing people with knowledge, knowhow, skills and/or competences required in particular trades/ occupations.





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## Annexe

## A-1 Evaluation Questions

Evaluation questions		Methods	Chapter
<b>1. Objectives of the Initiative and of the concept of the SVETII Pilot Project</b>			
<b>1.1</b>	<b>Objectives of the Initiative</b>		
1.1.1	Was the Pilot Project implemented in accordance with Switzerland's International Strategy for education, research and innovation?	Analysis of documents Interviews	2.2
1.1.2	To what extent were the objectives of the Initiative clearly documented and understandable?	Analysis of documents	2.1
1.1.3	To what extent are the individual objectives verifiable?	Analysis of documents	2.1
<b>1.2</b>	<b>Concept of the Pilot Project</b>		
1.2.1	What are the key elements of the Pilot Project?	Analysis of documents Interviews	2.1
1.2.2	Which elements of Swiss VET system were adopted? <sup>111</sup>	Analysis of documents Interviews	2.1
1.2.3	Which specific elements were excluded from adoption? What were the reasons for this?	Analysis of documents Interviews	2.1, 2.3
1.2.4	How were those elements of the Swiss VET system that were transferred adapted to the Indian sociocultural framework?	Analysis of documents Interviews	2.1, 2.3
1.2.5	To what extent was the concept of the Pilot Project further developed throughout the project? Which changes were made? What were the reasons for these changes?	Analysis of documents Interviews	2.3
1.2.6	Which further changes are planned? What are the reasons for these planned changes?	Interviews	2.3
<b>2. Project measures and analysis of implementation of SVETII Pilot Project</b>			
<b>2.1</b>	<b>General implementation</b>		
2.1.1	Was the concept of the Pilot Project implemented as planned?	Interviews Conceptual work	2.3
2.1.2	What changes from the original concept had to be made during the implementation? What were the reasons for these changes?	Interviews	2.3
2.1.3	In regards to the implementation of the Pilot Project, what were the recurring challenges that had to be dealt with?	Interviews	3.3
<b>2.2</b>	<b>Recruitment and profiles</b>		
2.2.1	How and according to which requirements/ standards were the future Indian professionals recruited and encouraged to take part in the Pilot Project?	Analysis of documents Interviews	3.3
2.2.2	How suitable were the recruitment procedure and the requirements for recruiting future Indian professionals?	Interviews	3.3
2.2.3	What is the general recruitment profile of the future professionals (educational background, age, gender, work experience etc.)? <sup>112</sup>	Analysis of documents Interviews	3.3

<sup>111</sup> This includes the questions to what extent a knowledge transfer has taken place and in how far didactic methods and concepts that are applied in the Swiss system were adopted in India.

Evaluation questions		Methods	Chapter
2.2.4	How and according to which requirements/ standards were the relevant stakeholders for the project recruited/ involved in the Initiative?	Interviews	2.2
2.2.5	How suitable were the (recruitment) procedures in recruiting/ involving relevant stakeholders?	Interviews	2.2
<b>2.3</b>	<b>Project organisation, partners, procedures of SVETII Pilot Project</b>		
2.3.1	What was the organisational setup of the Pilot Project? How did the coordination among the project partners and with the stakeholders and system-relevant protagonists in India work?	Analysis of documents Interviews	2.2
2.3.2	How efficient were the organisation of the Pilot Project and the coordination between the project partners and with the stakeholders/ system-relevant protagonists in India?	Interviews	2.2
2.3.3	How suitable are the project organisation and the coordination mechanisms in terms of integrating elements of the Swiss VET system into the Indian VET system?	Conceptual work	2.2
2.3.4	How suitable are the selected partners in order to integrate elements of the Swiss VET system into the Indian VET system?	Conceptual work	2.2
2.3.5	How suitable is the approach for integrating elements of the Swiss VET system into the Indian VET system?	Conceptual work	2.2
2.3.6	What were the different development stages that the Initiative underwent during its implementation?	Interviews	2.3
2.3.7	Are the activities of the project partners appropriately embedded into the Indian VET system and to what extent do they supplement it?	Analysis of documents Interviews	2.2
<b>2.4</b>	<b>Financial resources of the SVETII Pilot Project</b>		
2.4.1	What is the total cost of the Pilot Project?	Analysis of documents	2.4
2.4.2	What was the share of initial development costs?	Analysis of documents	2.4
2.4.3	Were the financial resources of the Pilot Project used efficiently?	Analysis of documents Interviews	2.4
2.4.4	How does the Pilot Project's incurred cost for each trained employee develop over time?	Analysis of documents Interviews	2.4
<b>2.5</b>	<b>Quality assurance of the SVETII Pilot Project</b>		
2.5.1	Which quality assurance measures were put in place?	Analysis of documents Interviews	2.5
2.5.2	Were these measures suitable in ensuring high-quality project outputs?	Conceptual work	2.5
<b>3. Outputs of the Pilot Project</b>			
<b>3.1</b>	<b>Methods, training documents, and infrastructures</b>		
3.1.1	Which training documents were made available to the future professionals, instructors, and teachers?	Analysis of documents	3.1
3.1.2	How are the newly developed training documents used?	Interviews	3.1
3.1.3	How do the newly developed training documents assist the future professionals, instructors, and teachers during the training?	Interviews	3.1
3.1.4	Are there any specific training documents missing?	Interviews	3.1

<sup>112</sup> The documents provided so far do not give an overview of the profile of the future professionals. This profile 3.1 has to be assessed based on the interviews taking into account that samples will be drawn.

Evaluation questions		Methods	Chapter
3.1.5	Which methods were used in order to manage an effective transfer of knowledge?	Interviews	3.1
3.1.6	Which infrastructures had to be provided for the training?	Analysis of documents Interviews	3.1
3.1.7	Are the available infrastructures sufficient?	Analysis of documents Interviews, Observations	3.1
3.1.8	Should the support which teachers, instructors, mastertrainers and trainees get from Swiss experts be improved? How?	Interviews	3.2
<b>3.2</b>	<b>Teachers, instructors, examiners, and mastertrainers</b>		
3.2.1	How many instructors, teachers, examiners, and mastertrainers were trained?	Analysis of documents	3.2
3.2.2	Which measures were adopted in order to train the instructors, teachers, examiners and mastertrainers?	Interviews	3.2
3.2.3	Were these measures sufficient to enable the teachers, instructors, examiners, and mastertrainers to provide the training/ to implement the examinations?	Interviews	3.2
3.2.4	How have the teachers, examiners, instructors, and mastertrainers applied what they have learnt?	Interviews	3.2
<b>3.3</b>	<b>SVETII programmes and trainees within the Pilot Project</b>		
3.3.1	How many companies have made apprenticeships under the Swiss VET Initiative available? On how many sites? How many apprenticeships were made available in total?	Analysis of documents	3.3
3.3.2	Do further companies intend to make more apprenticeships under the Swiss VET Initiative available?	Interviews	3.3
3.3.3	Could enough trainees be recruited for apprenticeships under the Pilot Project?	Interviews	3.3
<b>4. Impacts of the Pilot Project</b>			
<b>4.1</b>	<b>Competences and professional perspectives</b>		
4.1.1	To what extent have the occupational competences of the future professionals improved thanks to this SVETII programme?	Interviews	4.1
4.1.2	Could the work productivity of the future professionals be improved? <sup>113</sup>	Interviews	4.1
4.1.3	Which additional indicators can be used to monitor the success of the training?	Interviews Conceptual work	4.1
4.1.4	On the grounds of their training, do the SVETII diploma holders maintain their employment in the respective company? If yes, with which status and perspectives? If not, why not?	Interviews	4.1
4.1.5	What additional effects does the SVETII programme have on the partner companies and future professionals?	Interviews	4.1
<b>4.2</b>	<b>Perception and acceptance of the Pilot Project</b>		
4.2.1	Do the stakeholders and future professionals based in India perceive the Swiss dual VET model in a positive light?	Interviews	4.2
4.2.2	Which aspects have been perceived as particularly positive?	Interviews	4.2

<sup>113</sup> As we will not be able to measure productivity before and after the training, approximating indicators (e.g. salaries before and after) need to be identified

Evaluation questions		Methods	Chapter
4.2.3	Which aspects are perceived as less positive?	Interviews	4.2
<b>4.3</b>	<b>Experiences of Swiss partners</b>		
4.3.1	To what extent and in what fields were the partners in Switzerland able to learn from experience made in the framework of the Pilot Project?	Interviews	4.4
<b>5. Outcomes of the Pilot Project</b>			
<b>5.1</b>	<b>Sustainability</b>		
5.1.1	To what extent does the funding model (PPP) assist the development of a sustainable and self-supporting system?	Analysis of documents Conceptual work	5.5
5.1.2	Are the project stakeholders willing and in the position (personnel and financially) to support the Initiative in the long-term?	Interviews	5.5
5.1.3	Is the transition to a self-sustaining business model assessed as realistic by the project stakeholders? What are the preconditions?	Interviews	5.5
5.1.4	Which further (non-financial) prerequisites need to be given in order to guarantee the sustainability of the Initiative?	Interviews	5.5
<b>5.2</b>	<b>Effects in India</b>		
5.2.1	Does the Initiative act as a positive supplement to the Indian vocational education and training system?	Interviews	4.3
<b>5.3</b>	<b>Effects in Switzerland</b>		
5.3.1	What were the effects of the adaptation of the Swiss VET system to the Indian sociocultural framework on the Swiss VET system in Switzerland itself?	Interviews	4.4
<b>6. Synthesis and Lessons Learnt</b>			
<b>6.1</b>	<b>Achievement of objectives</b>		
6.1.1	To what extent were the objectives of the Initiative met so far?	Synthesis	5.2, 5.4
6.1.2	Was the «systemic transfer» of elements of the Swiss VET system accomplished?	Synthesis	5.3
6.1.3	How realistic were the objectives of the Initiative?	Synthesis	5.4
6.1.4	Did the Initiative cause unexpected effects?	Synthesis	5.6
6.1.5	What was the value of the concept of the Pilot Project within the sociocultural context in India?	Synthesis	4.3, 4.3
6.1.6	How does the cost of each trainee compare to the results achieved?	Synthesis	5.2
6.1.7	In how far does the Initiative constitute a sustainable concept in view of its objective to provide a self-sustaining business model for educational services based on a transfer of elements of the Swiss VET system?	Synthesis	5.5
6.1.8	Are the existing data coherent with the results of the «proof of concept»?	Analysis of documents	5.2
<b>6.2</b>	<b>Lessons learnt and «systemic transfer» to other countries</b>		
6.2.1	To what extent does the concept of the Pilot Project need further development?	Synthesis	5.8
6.2.2	How transferable is the concept to other target countries of interest for Switzerland? What are the lessons learnt?	Synthesis	5.8

Table 17: Evaluations questions and, methods used in order to answer the questions and chapter of the final report in which the answers are presented

## A-2 Organisation and Milestones of the Evaluation

Steps	Description	Delivery dates	
1	Kick-off meeting with OPET	Relevant documents handed over to the evaluation team. Feedback by C. Lippuner regarding the project design.	November 30, 2012
2	Document analysis	Analysis of the documents available.	December 2012
3	Explorative interviews	Face-to-face or phone interviews with representatives of OPET/ SERI, Swissmem, SFIVET, SkillSonics Switzerland and India.	December 2012/ February 2013
4	Work on concept draft	Detailed draft of concept for the evaluation formulated.	December 2012
5	Meeting of the Monitoring Committee	Presentation and discussion of the draft evaluation concept.	January 17, 2013
	Work on final concept	Delivery of final detailed evaluation concept.	February 2013
6	Organisation/ logistics of investigations	Interviews in India: Organisation of travel and accommodation, Contacts with interview partners and tentative interview dates agreed.	January/ February 2013
7	Interviews in Karnataka	Face-to-face interviews with SkillSonics team, partner companies (managers, instructors and SVETII trainees), ITIs (principals and teachers) and DET representative.	March 4-23, 2013
8	Interviews Maharashtra	Face-to-face interviews with partner companies, ITI and DET. Phone interview with one partner company.	March 25-30 and April 1-13, 2013
9	Interviews Gujarat	Face-to-face interviews with partner companies (managers, instructors and SVETII trainees) and ITI (principal and teachers).	April 15-20, 2013
10	Interview Goa	Phone interview with one partner company (manager/ coordinator).	April 15-20, 2013
11	Analysis of interviews	Analysis of the interview results following the evaluation questions.	May 2013
12	Project meeting	Discussion of specific questions with C. Lippuner and F. Probst	April 30, 2013
13	Intermediate report	Intermediate report submitted to SERI.	May 31, 2013
14	Workshop	Workshop offering the members of the Monitoring Committee (including most of the interview partners of the explorative interviews) the opportunity to discuss first findings of the evaluation and questions as well as partners for further interviews.	June 19, 2013
15	Contacts to further companies and associations in India	Contact further companies in India which do not yet participate in the Initiative; contacts to Indian chambers of commerce and trade associations.	June 2013
16	Interviews with companies/ associations	Phone interviews with additional companies in India, Indian chambers of commerce and trade associations.	July 2013
17	Draft final report	Draft and submission of final report to SERI.	August/ September 2013
18	Final project meeting	Presentation and discussion of the draft final report with SERI and the Monitoring Committee.	October 2013
19	Finalization of report	Comments and inputs by SERI and the Monitoring Committee taken into account.	October/ November 2013
20	Final report	Final report submitted to SERI.	December 2013
21	Final numbers	Final numbers based on internal final report added.	April 2014

Table 18: Milestones of the evaluation

### A-3 Members of the Monitoring Committee of the Evaluation

Name	Institution
Laura Antonelli Müdespacher, Head of Unit, International Education Projects	State Secretariat for Education, Research and Innovation SERI
Claudia Lippuner, Project Manager, International Education Projects	State Secretariat for Education, Research and Innovation SERI
Jürg Bieri, Deputy Head of Unit, Project Promotion and Development	State Secretariat for Education, Research and Innovation SERI
Arthur Glättli, Managing Director, Vocational Education and Training	Swissmem
Dr. Dalia Schipper, Director	Swiss Federal Institute for Vocational Education and Training SFIVET
Hanspeter Tanner, Senior VET Consultant	Swiss Federal Institute for Vocational Education and Training SFIVET
G. P. Chandra Kumar, Founder, Chairman and CEO	SkillSonics India Private Limited.
Franz Probst, Chairman	SkillSonics AG Switzerland
<i>Representatives of the Federal Commission for Vocational and Professional Education and Training (Eidgenössische Berufsbildungskommission (EBBK)):</i>	
Mark Gasche, Head of Unit VPET	Swiss Conference of Cantonal Ministers of Education (Schweizerische Konferenz der kantonalen Erziehungsdirektoren (EDK))
Véronique Polito, Central Secretary, responsible for education and youth policy	Swiss Federation of Trade Unions (Schweizerischer Gewerkschaftsbund (SGB))
Jürg Zellweger, Member of the management board, section education, work safety and health protection	Swiss Employers Confederation (Schweizerischer Arbeitgeberverband (AGV))

Table 19: Stakeholders of the Initiative associated to the Monitoring Committee of the evaluation of the SVETII Pilot Project



## A-4 Targets and Achievements of the Pilot Project: Overview

	Targets 2009	Targets 2010/11	Targets 2012/13
	Achievements 2009-2011 (pilot phase)		Achievements until spring 2013 (pilot closure)
<b>Partner companies</b>	Involve 3-5 Swiss and 1-2 Indian companies	Increase to 40 companies <sup>114</sup>	Involve 7-10 Swiss companies and 1-3 other companies <sup>115</sup>
	5 pilot partner companies (all Swiss): Buhler (India) Pvt. Ltd., Starrag India Pvt. Ltd., Bobst India Pvt. Ltd., Burckhardt Com-pression (India) Pvt. Ltd., Rieter India Pvt. Ltd.		In total, 10 companies joined the Initiative <sup>116</sup> whereof 9 companies already started with the training <sup>117</sup> Thereof: 8 Swiss companies / 1 German company / 1 Indo-American company
<b>SVETII trainees</b>	10-20 SVETII trainees per company; 80 SVETII trainees per year; 2009-2013: total of 250 SVETII trainees in 4-5 classes	Increase from 25 to 250 trainees (incl. all cohorts)	2012: ca. 130 trainees 2013: ca. 105 trainees
	121 MSPT trainees are / were trained within the SVETII Pilot Project: – MSPT batch 1.09: 18 (passed) – MSPT batch 1.10: 22 (passed) – MSPT batch 1.11: 81 (in progress)  In addition, specialised SVETII programmes were introduced in 2011: – Specialised batch 2.11: 13 (passed)		In 2012, another 80 SVETII trainees started the MSPT and specialised programmes, no longer belonging to the Pilot Project: – MSPT-batch 1.12: 69 (in progress) – Specialised batch 2.12: 11 (in progress)
<b>Duration of course</b>	2-3 years	2 years	1-2 years (in consultation with partner companies)
	MSPT programmes: 2 years		MSPT programmes: generally 2 years, one company with 1-year-programme <i>Specialised programmes (welding, electrical, machinist): 1 year</i>
<b>Locations</b>	Pune, Bangalore, potentially Mumbai	Expand from 2 to 4	4 existing (Pune, Bangalore, Anand, Chandrapur) plus additional locations depending on new partner companies
	2009-10: 2 locations (Bangalore, Pune) 2011: 4 locations (Bangalore, Pune, Chandrapur, Anand)		6 locations are currently included in the Initiative: Bangalore (Karnataka), Pune (Maharashtra), Chandrapur (Maharashtra), Anand (Gujarat) Vadodara (Gujarat), <i>Bicholim (Goa, not yet started)</i>

<sup>114</sup> Including vendors of companies and Indian companies active in Switzerland

<sup>115</sup> Other than Swiss partner companies have to pay a fee per trainee for the project organisation/coordination.

<sup>116</sup> See annexe A-7 for detailed information on the companies involved in the Initiative.

<sup>117</sup> Nestlé did not yet start with the training as the MOU with the DET is currently pending in Goa.

	Targets 2009	Targets 2010/11	Targets 2012/13
	Achievements 2009-2011 (pilot phase)		Achievements until spring 2013 (pilot closure)
<b>Industrial Training Institutes (ITI)</b>	2-4 ITIs	Involve ITIs in new locations	4-9 ITIs
	Teachers from the following 14 ITIs were trained 2009-2011 <sup>118</sup> : – <b>Bangalore (Dist.):</b> ITI Hosur Road, ITI Peenya, ITI Hubli, ITI Belgaum, ITI KGF, ITI Wilson Garden, ITI Hosakerehalli – <b>Pune (Dist.):</b> ITI Aundh, ITI Shirur, ITI Bhor, ITI Wai – <b>Chandrapur:</b> ITI Chandrapur – <b>Vadodara/ Karamsad/ Anand:</b> ITI J.V.Patel, ITI Vidhyanagar		Teachers from the following 17 ITIs were trained from 2009 until spring 2013: – <b>Bangalore (Dist.):</b> ITI Hosur Road, ITI Peenya, ITI KGF, ITI Wilson Garden, ITI Hosakerehalli, ITI Hubli, ITI Belgaum – <b>Pune (Dist.):</b> ITI Aundh, ITI Wai, ITI Bhor, ITI Shirur, ITI Abhinav – <b>Chandrapur:</b> ITI Chandrapur – <b>Vadodara/ Karamsad/ Anand:</b> ITI Anand, ITI Ebrahim Bawany, ITI J.V.Patel, ITI Vidhyanagar – <b>Goa:</b> ITI Bicholim However, some teachers may have moved to other ITIs. In addition, teachers from private ITIs and polytechnics as well as free-lancers are involved when and where needed.
<b>Teachers</b>	--	Increase from 16 to about 40	Depending number of trainees and involved ITIs
	57 teachers were trained until end of 2011 <sup>119</sup>		65 teachers were trained until end of 2012 79 teachers were trained until March 2013 64 teachers <sup>120</sup> are on the list of teachers in January 2013
<b>Instructors</b>	To be defined by participating companies	Increase decided by participating companies	Decided by participating companies
	43 instructors were trained until end of 2011 <sup>121</sup>		53 instructors were trained until end of 2012 73 teachers instructors were trained until March 2013 48 instructors <sup>122</sup> are on the list of instructors in January 2013
<b>Examiners</b>	--	Prepare and implement examiners training and examinations	Ca. 15 examiners per year
	38 examiners <sup>123</sup> were trained until end of 2011		21 examiners are on the final list of examiners (January 2013) (no more examiners trained until March 2013)

<sup>118</sup> As no detailed and up-to-date information about the ITIs involved in the Initiative is available, the ITIs of teachers participating in the SVETII trainings are taken as approximate figure.

<sup>119</sup> Incl. 2 members of the SkillSonics team and 1 employee of ABB Ltd. Bangalore

<sup>120</sup> Whereof 4 teachers did not seem to participate in any of the trainings; 2 trained teachers are not part of this list.

<sup>121</sup> Incl. 2 members of the SkillSonics team

<sup>122</sup> 2 trained instructors left the company and 1 trained instructor is working for a company not yet participating.

<sup>123</sup> Incl. 28 instructors from companies, 4 teachers from ITIs and 6 members of the SkillSonics team

	Targets 2009	Targets 2010/11	Targets 2012/13
	Achievements 2009-2011 (pilot phase)		Achievements until spring 2013 (pilot closure)
<b>Organisational structure</b>	Steering committee, sounding board, executive management in Switzerland and India, 6 working groups (12 external individuals and 4-5 from project)	Increase FTE of involved individuals with function in project organisation from 4 to 8-10 by end 2011; steering committee, sounding board, executive management, various working groups	To maintain: steering committee, sounding board, executive management, ca. 6 working groups
	Bodies of the Initiative: steering committee, sounding board, executive management in Switzerland and India, various working groups (see chapter 2.2 for details).		
<b>Institutions involved</b>	SICC Switzerland and India, Swissmem, SFIVET, ITIs, CII, FICCI, OPET	SICC Switzerland and India, Swissmem, SFIVET, ITIs, CII, FICCI, OPET	<ul style="list-style-type: none"> <li>– SkillSonics: project management</li> <li>– Swissmem: project ownership, contributing to content of programmes, exams and training of experts, development of MSPT-profiles, consulting/ support</li> <li>– SFIVET: consulting and services regarding curriculum development, training of instructors, teachers and examiners</li> </ul>
	<ul style="list-style-type: none"> <li>– SICC Switzerland and India: project ownership</li> <li>– Nacks Ventures: project management (mandated by SICC India)</li> <li>– OPET: co-Initiator and supervisor</li> <li>– Swissmem (MOU) and SFIVET (mandate agreement): supporting project partners</li> <li>– DET/ DVET and ITIs: MOU between DET in Karnataka / DVET in Maharashtra and SICC India for regarding vocational training cooperation</li> <li>– DGET: support confirmed in bilateral discussions (national level)</li> <li>– FICCI, CII: agreements with SICC regarding educational cooperation mentioning the Initiative</li> </ul>	<ul style="list-style-type: none"> <li>– Swissmem: project ownership</li> <li>– SkillSonics: project management<sup>124</sup> (mandated by Swissmem)</li> <li>– OPET/ SERI: co-Initiator and supervisor</li> <li>– SFIVET (mandate agreement): supporting project partners</li> <li>– DET/ DVET and ITIs: support confirmed in discussions, no MOU signed yet</li> <li>– DGET: support confirmed in bilateral discussions (national level)</li> <li>– FICCI, CII: agreements with SkillSonics regarding educational cooperation mentioning the Initiative</li> </ul>	
<b>Other aims</b>	--	Develop institutions required for VET training such as an institution akin to SFIVET	<ul style="list-style-type: none"> <li>– Completion of MSPT batches 1.10 and 1.11</li> <li>– Develop institutions vital for VET training such as institution akin to SFIVET<sup>125</sup></li> </ul>
	This institutional development is still under preparation.		<ul style="list-style-type: none"> <li>– Batch 1.10 has completed the training in 2012.</li> <li>– This institutional development is still under preparation.</li> </ul>

Table 20: Quantitative and qualitative objectives set for the Initiative (sources: contribution requests, project reports, compilations provided by SkillSonics; the numbers of SVETII trainees/diploma holders differ slightly from figures provided by partners companies; March 2013)

<sup>124</sup> The team of Nacks Ventures, the implementing organisation for the pilot phase, was taken over by SkillSonics as of 01.01.2012.

<sup>125</sup> in Bangalore, Pune, Anand, Chandrapur and further locations depending on the partner companies

## A-5 Swiss VET Trainings for Teachers and Instructors

When	Where	Participants	Duration	Mastertrainers
July 2009	Pune, Maharashtra	8 Instructors	4 Weeks (22 Days)	Hanspeter Tanner, SFIVET Martin Holder, SFIVET
July 2009	Pune, Maharashtra	13 Teachers	3 Weeks (18 Days)	Hanspeter Tanner, SFIVET Martin Holder, SFIVET
September 2010	Bangalore, Karnataka	9 Instructors	2 weeks (10 Days)	Hanspeter Tanner, SFIVET Martin Nydegger, SFIVET
September 2010	Bangalore, Karnataka	16 Teachers	2 weeks (10 Days)	Hanspeter Tanner, SFIVET Martin Nydegger, SFIVET
February 2011	Pune, Maharashtra	17 Examiners	3 Days	Thomas Meier, SFIVET Hanspeter Tanner, SFIVET
July 2011	Bangalore, Karnataka	8 Examiners	2 Days	Ramesh Babu, SkillSonics
July 2011	Karamsad Gujarat	6 Examiners	2 Days	Ramesh Babu, SkillSonics
July 2011	Pune, Maharashtra	12 Instructors	1 week (5 Days)	Hanspeter Tanner, SFIVET Martin Nydegger, SFIVET
July 2011	Pune, Maharashtra	14 Teachers	1 week (5 Days)	Hanspeter Tanner, SFIVET Martin Nydegger, SFIVET
August 2011	Bangalore, Karnataka	4 Instructors	1 week (5 Days)	Varadha and Ramesh Babu, SICC Hanspeter Tanner and Martin Nydegger, SFIVET
August 2011	Bangalore, Karnataka	14 Teachers	1 week (5 Days)	Varadha and Ramesh Babu, SICC Hanspeter Tanner and Martin Nydegger, SFIVET
September 2011	Pune, Maharashtra	7 Examiners	2 Days	Ramesh Babu, SkillSonics
December 2011	Bangalore, Karnataka	10 Instructors	1 week (5 Days)	Varadha, SICC Ramesh Babu, SICC
January 2012	Vadodara Gujarat	8 Instructors	1 week (5 Days)	Ramesh Babu, SkillSonics Arun Malhotra, SkillSonics
January 2012	Vadodara Gujarat	5 Teachers	1 week (5 Days)	Ramesh Babu, SkillSonics Arun Malhotra, SkillSonics
February 2012	Goa	2 Instructors	1 week (5 Days)	Ramesh Babu, SkillSonics Arun Malhotra, SkillSonics
February 2012	Goa	3 Teachers	1 week (5 Days)	Ramesh Babu, SkillSonics Arun Malhotra, SkillSonics
November 2012	Bangalore, Karnataka	8 Mastertrainers («train the trainer»)	2 weeks (10 Days)	Hanspeter Tanner, SFIVET Martin Nydegger, SFIVET
February 2013	Pune, Maharashtra	15 Instructors	1 Week (5 Days)	Ramesh Babu, SkillSonics Srinath C V, SkillSonics
February 2013	Pune, Maharashtra	10 Teachers	1 Week (5 Days)	Ramesh Babu, SkillSonics Srinath C V, SkillSonics
March 2013	Chandrapur, Maharashtra	5 Instructors	1 Week (5 Days)	Srinath C V, SkillSonics Ashok Kinikar, SkillSonics
March 2013	Chandrapur, Maharashtra	4 Teachers	1 Week (5 Days)	Srinath C V, SkillSonics Ashok Kinikar, SkillSonics

Table 21: Training for teachers, instructors, mastertrainers and examiners in India (26.03.2013; source: compilation received from SkillSonics)

## A-6 Implementation of SVETII Programmes per Company

	Subject/ trades	Duration of programmes		Number of SVETII trainees/ diploma holders per batch						Number of trained instructors**		Number of active instructors*	Comment
		1 y.	2 y.	1.09	1.10	1.11/ 2.11	1.12/ 2.12	Total	Vision	Instructors	Examiners		
Buhler (India) Pvt. Ltd.	MSPT		X	6	10	8	7	31	10	11	7	1 coordinator (100%) plus 3 instructors (1x 100%, 2x ~10%)	Theory classes in collaboration with EFD Induction
EFD Induction Pvt. Ltd.	MSPT		X	-	-	5	4	9	10	3	2	2 instructors <sup>126</sup> (~25% each)	Theory classes in collaboration with Buhler
Starrag India Pvt. Ltd.	MSPT		X	-	5	9	-	14	-	3	1	1 coordinator/ instructor (100%) and 1 instructor (5-15%)	1-year-MSPT based on Starrags' needs (not all 17 subjects covered)
	MSPT	X		-	-	-	6	6	100				
Bobst India Pvt. Ltd.	MSPT		X	2	-	3	7	12	10	3	2	1 instructor (100%) <sup>127</sup> 1-2 part-time instructors (~30%)	Bobst is imple- menting additional short-term courses for machinists/ machine operators
	Welding	X		-	-	3	-	3					
	Electrical	X		-	-	3	-	3					
	Machinist	X		-	-	-	4	4					
Burckhardt Com- pression (India) Pvt. Ltd.	MSPT		X	6	2	2	3	13	2-3	4	3	1 coordinator/ instructor and 3 instructors (all 30-40%)	Burckhardt is the only partner com- pany that trains its existing workforce with the Initiative.
	Welding	X		-	-	1	2	3	?				
	Electrical	X		-	-	2	-	2	?				
Rieter India Pvt. Ltd.	MSPT		X	4	5	12	10	31	20 <sup>128</sup>	15	7	1 coordinator/ instructor and 2 instructors (all 100%)	
	Welding	X		-	-	2	3	5	6				
	Electrical	X		-	-	2	2	4	4				

<sup>126</sup> The third instructor just got trained in March 2013 and will soon join the others.

<sup>127</sup> Full-time involved in the Initiative since January 2013

<sup>128</sup> Rieter is planning to train the 30 SVETII trainees in total per batch in two shifts.

	Subject/ trades	Duration of programmes		Number of SVETII trainees/ diploma holders per batch						Number of trained instructors**		Number of active instructors*	Comment
		1 y.	2 y.	1.09	1.10	1.11/ 2.11	1.12/ 2.12	Total	Vision	Instructors	Examiners		
ACC Limited	MSPT		X	-	-	12	-	12	?	7 <sup>129</sup>	0	1 coordinator/ instructor (100%) and 6 part-time instructors	
ABB Limited	MSPT		X	-	-	10	10	20	?	12 <sup>130</sup>	3	1 coordinator/ instructor (100%) and 5 part-time instructors (10-30%)	
GMM Pfaudler Ltd.	MSPT		X	-	-	20	22	42	20 <sup>131</sup>	13	3	1 coordinator/ instructor <sup>132</sup> (100%) and 13 part-time instructors (each 25-30%)	
Nestlé India Ltd.	Electrical	X		-	-	-	-	-	5	2	0		Nestlé has not yet started due to the pending MOU with the government.

Table 22: Overview of implemented Swiss VET programmes at the partner companies (March 2013; source: interviews and compilations by SkillSonic; regarding the numbers of SVETII trainees/diploma holders: the figures differ slightly from the ones provided by partners companies)

\* Note: In addition to the instructors listed, all companies are working with internal or external experts to train the SVETII trainees in certain subjects.

\*\*until March 2013

<sup>129</sup> One of the trained instructors came from ACC Wadi, all others from ACC Chandrapur

<sup>130</sup> Two of the trained instructors came from ABB Bangalore, the others from ABB Vadodara.

<sup>131</sup> For around 5 years; not yet any idea how many trainees they will train after that, but are planning to continue with MSPT plus shorter, more specialised programmes.

<sup>132</sup> Plus one administrative support (100%)

## A-7 Partner Companies of the SVETII Pilot Project: Overview

Company	Sector	Business Activities	Operations in India since	Staff Strength (approx.)	Address
ABB India Pvt. Ltd., Vadodara <a href="http://www.abb.co.in">www.abb.co.in</a>	Power and automation technologies	– Leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact.	1949	India: over 10'355	PPHV Training Centre ABB Ltd. Maneja Village Vadodara 390 013 Gujarat
ACC Holcim, Chandrapur <a href="http://www.holcim.com">www.holcim.com</a>	Cement manufacturing	– Manufacturing and distribution of cement – Production, processing and distribution of aggregates (crushed stone, gravel and sand), ready-mix concrete and asphalt	2005: Holcim took over ACC Ltd.	India: about 9'000	ACC Limited Chanda Cement Works Chandrapur 442 502 Maharashtra
Buhler (India) Private Ltd. Bangalore <a href="http://www.buhlergroup.com">www.buhlergroup.com</a>	Plant and machinery	– Specializing in plant, equipment, and services for processing basic foods and for manufacturing advanced materials – Machinery for grain processing manufactured at Bangalore plant incl. in- and export of machines	1992	Bangalore: 500	13-D, 12 D, 13 C & 13-B KIADB Industrial Area, Attibele Bangalore 562 107 Karnataka
Burckhardt Compression (India) Pvt. Ltd., Pune <a href="http://www.bc-india.com">www.bc-india.com</a>	Reciprocating compressors	– One of the world's largest manufacturers of reciprocating compressors. – Experience in customizing reciprocating compressors in any given application in the field of oil refining, chemical and petrochemical industries, industrial gases, compressed natural gas for vehicle, gas transport and storage	1988 (Sulzer) 2005 (Compressor division transferred to Buckhardt Compression)	Pune: 200 · 50 operators on the shop floor	Gat No. 304 Village Kondhapuri Pune-Nagar Road Taluka Shirur Pune 412 209 Maharashtra
Bobst India Private Ltd., Pune <a href="http://www.bobstgroup.com">www.bobstgroup.com</a>	Printing and packaging	– Leading supplier of equipment and services to packaging manufacturers in the folding carton, corrugated board and flexible materials industries. – India: Only paper packaging	1996 (manufacturing since 2009)	Pune: 200 · 50 in service, · 90 on shop floor · 60 admin etc.	Plot No.82, 126-132 Village Kasar Amboli Post Ambadvet, Taluka Mulshi Pune 412 108 Maharashtra
EFD Induction (India) Private Ltd., Bangalore <a href="http://www.efd-induction.com">www.efd-induction.com</a>	Induction heating products	Developing the industry's most comprehensive range of induction heating products – industrial heat treatment systems – industrial heat processing systems – mobile heat generators	1995	Bangalore: 180 (plus 100 on contract basis)	Plot 16 C&D, KIADB Industrial Area Attibele Bangalore 562 107 Karnataka

Company	Sector	Business Activities	Operations in India since	Staff Strength (approx.)	Address
		<ul style="list-style-type: none"> <li>– universal heat generators</li> <li>– high-output solid-state welders</li> </ul>			
GMM (Gujarat Machines Manufacturers) Pfaudler Ltd., Karamsad <a href="http://www.gmmpfaudler.com">www.gmmpfaudler.com</a>	Chemical and pharmaceutical market	<ul style="list-style-type: none"> <li>– Leading supplier of engineered equipment and systems for critical applications in the global chemical and pharmaceutical market</li> <li>– Joint venture with Pfaudler Inc. since 1987 (40%), stake increased to 51% in 1999</li> <li>– Acquired Mavag AG, Switzerland in 2008</li> </ul>	1962	Karamsad: 290 · 120 workers · 110 staff · 60 engineers	Vithal Udyognagar Anand-Sojitra Road Karamsad 388 325 Gujarat
Nestlé India Ltd., Goa <a href="http://www.nestle.in">www.nestle.in</a>	Manufacturing and marketing of processed foods and beverages	<ul style="list-style-type: none"> <li>– Leading nutrition, health and wellness company that for manufacturing and marketing of processed food with various brands in following categories: milk products and nutrition, beverages, prepared dishes and cooking aids, chocolates and confectionery, vending and food services, exports, start healthy stay healthy</li> <li>– Research and Development Centre, several branch offices and seven factories in India</li> </ul>	1962 (Goa plant in 1997)	India: 5'000	P O Box No 1 Village Maulinge (North) Bicholim 403 504 Goa
Rieter India Private Ltd., Pune <a href="http://www.rieter.com">www.rieter.com</a>	Textile machinery and components	<ul style="list-style-type: none"> <li>– Technological leader for textile machinery and components for short staple fibre spinning</li> <li>– Production of four different machines for preparation and spinning process itself</li> </ul>	2003/04	<i>Wing:</i> 900 (incl. contract workers) <i>India:</i> 1'400 workers in 5 locations	Gat No. 768/2, Village Wing Shindewadi-Bhor Road Taluka Khandala District Satara Wing 412801 Maharashtra
Starrag India Private Limited, Bangalore <a href="http://www.starragheckert.com">www.starragheckert.com</a>	Machine tool industry	<ul style="list-style-type: none"> <li>– Elaboration and execution of turnkey solutions for parts production in aerospace, energy, transport and general engineering industries</li> <li>– Technology centre in Bangalore to perform prove-outs, trial cuts and job work with state of the art Starrag Horizontal Machining Centre</li> </ul>	2010	Bangalore: 60	No. 66, KIADB Bengaluru Aerospace Park Singahalli Village Devanahalli Taluk Bangalore 562 110 Karnataka ( <i>since Jan. 2013</i> )

Table 23: Detailed information on the companies involved in the Initiative (March 2013; sources: websites of the companies and Embassy of Switzerland in India (2010): Swiss-Indian Trade and Investment Relations. VSSU Graphics: New Delhi)



## A-8 Cost Presentation of the SVETII Pilot Project

COSTS PER PROJECT PARTNER	Public Contribution		Private Sector Contribution		TOTAL	
	CHF	Share	CHF	Share	CHF	Share
<b>(2008) 2009</b>						
SICC Switzerland	305'966.70	31.05%	222'287.90	15.99%	528'254.60	22.24%
SICC India / Nacks Ventures	375'762.50	38.14%	10'463.55	0.75%	386'226.05	16.26%
Swissmem	147'620.70	14.98%	435'750.00	31.35%	583'370.70	24.56%
SFIVET	155'921.70	15.83%	0.00	0.00%	155'921.70	6.56%
Partner Companies (I / CH)	0.00	0.00%	596'037.75	42.88%	596'037.75	25.09%
Divers	0.00	0.00%	125'534.00	9.03%	125'534.00	5.28%
<b>TOTAL</b>	<b>985'271.60</b>	<b>100.00%</b>	<b>1'390'073.20</b>	<b>100.00%</b>	<b>2'375'344.20</b>	<b>100.00%</b>
<b>2010</b>						
SICC Switzerland	230'271.84	32.89%	124'057.25	13.09%	354'329.09	21.51%
SICC India / Nacks Ventures	337'519.00	48.21%	0.00	0.00%	337'519.00	20.48%
Swissmem	132'362.48	18.90%	199'474.80	21.05%	331'837.28	20.14%
SFIVET	0.00	0.00%	200'000.00	21.11%	200'000.00	12.14%
Partner Companies in India	0.00	0.00%	261'999.03	27.65%	261'999.03	15.90%
Divers	0.00	0.00%	161'956.00	17.09%	161'956.00	9.83%
<b>TOTAL</b>	<b>700'153.32</b>	<b>100.00%</b>	<b>947'487.08</b>	<b>100.00%</b>	<b>1'647'640.40</b>	<b>100.00%</b>
<b>2011 (-03/2012)</b>						
SICC Switzerland	482'872.39	24.93%	303'288.50	18.58%	786'160.89	22.03%
SICC India / Nacks Ventures	759'950.50	39.24%	0.00	0.00%	759'950.50	21.29%
Swissmem	484'423.30	25.01%	111'187.50	6.81%	595'610.80	16.69%
SFIVET	209'405.95	10.81%	128'018.73	7.84%	337'424.68	9.45%
Partner Companies in India	0.00	0.00%	914'977.19	56.06%	914'977.19	25.64%
Divers	0.00	0.00%	174'623.00	10.70%	174'623.00	4.89%
<b>TOTAL</b>	<b>1'936'652.14</b>	<b>100.00%</b>	<b>1'632'094.92</b>	<b>100.00%</b>	<b>3'568'747.06</b>	<b>100.00%</b>
<b>2012</b>						
SkillSonics India	389'955.00	51.08%	0.00	0.00%	389'955.00	18.82%
Swissmem (partly out-sourced to SkillSonics CH)	275'416.00	36.07%	306'238.00	23.40%	581'654.00	28.07%
SFIVET	98'065.00	12.85%	218'307.00	16.68%	316'372.00	15.26%
Partner Companies in India	0.00	0.00%	784'349.00	59.92%	784'349.00	37.85%
Divers	-	-	-	-	-	-
<b>TOTAL</b>	<b>763'436.00</b>	<b>100.00%</b>	<b>1'308'894.00</b>	<b>100.00%</b>	<b>2'072'330.00</b>	<b>100.00%</b>
<b>2013</b>						
SkillSonics India	294'368.00	49.08%	13'894.00	1.33%	308'262.00	18.71%
Swissmem (partly out-sourced to SkillSonics CH)	208'416.00	34.75%	416'184.00	39.70%	624'600.00	37.90%
SFIVET	96'934.00	16.16%	226'234.00	21.58%	323'168.00	19.61%
Partner Companies in India	0.00	0.00%	391'896.00	37.39%	391'896.00	23.78%
Divers	-	-	-	-	-	-
<b>TOTAL</b>	<b>599'718.00</b>	<b>100.00%</b>	<b>1'048'208.00</b>	<b>100.00%</b>	<b>1'647'926.00</b>	<b>100.00%</b>

Table 24: Cost presentation of the Swiss VET Initiative according to financial statement submitted to SERI; costs per project partner and share per project partner

COSTS PER PROJECT PARTNER	Public Contribution		Private Sector Contribution		TOTAL	
	CHF	Share	CHF	Share	CHF	Share
<b>(2008) 2009</b>						
SICC Switzerland	305'966.70	57.92%	222'287.90	42.08%	<b>528'254.60</b>	<b>100.00%</b>
SICC India / Nacks Ventures	375'762.50	97.29%	10'463.55	2.71%	<b>386'226.05</b>	<b>100.00%</b>
Swissmem	147'620.70	25.30%	435'750.00	74.70%	<b>583'370.70</b>	<b>100.00%</b>
SFIVET	155'921.70	100.00%	0.00	0.00%	<b>155'921.70</b>	<b>100.00%</b>
Partner Companies (I / CH)	0.00	0.00%	596'037.75	100.00%	<b>596'037.75</b>	<b>100.00%</b>
Divers	0.00	0.00%	125'534.00	100.00%	<b>125'534.00</b>	<b>100.00%</b>
<b>TOTAL</b>	<b>985'271.60</b>	<b>41.48%</b>	<b>1'390'073.20</b>	<b>58.52%</b>	<b>2'375'344.20</b>	<b>100.00%</b>
<b>2010</b>						
SICC Switzerland	230'271.84	64.99%	124'057.25	35.01%	<b>354'329.09</b>	<b>100.00%</b>
SICC India / Nacks Ventures	337'519.00	100.00%	0.00	0.00%	<b>337'519.00</b>	<b>100.00%</b>
Swissmem	132'362.48	39.89%	199'474.80	60.11%	<b>331'837.28</b>	<b>100.00%</b>
SFIVET	0.00	0.00%	200'000.00	100.00%	<b>200'000.00</b>	<b>100.00%</b>
Partner Companies in India	0.00	0.00%	261'999.03	100.00%	<b>261'999.03</b>	<b>100.00%</b>
Divers	0.00	0.00%	161'956.00	100.00%	<b>161'956.00</b>	<b>100.00%</b>
<b>TOTAL</b>	<b>700'153.32</b>	<b>42.49%</b>	<b>947'487.08</b>	<b>57.51%</b>	<b>1'647'640.40</b>	<b>100.00%</b>
<b>2011 (-03/2012)</b>						
SICC Switzerland	482'872.39	61.42%	303'288.50	38.58%	<b>786'160.89</b>	<b>100.00%</b>
SICC India / Nacks Ventures	759'950.50	100.00%	0.00	0.00%	<b>759'950.50</b>	<b>100.00%</b>
Swissmem	484'423.30	81.33%	111'187.50	18.67%	<b>595'610.80</b>	<b>100.00%</b>
SFIVET	209'405.95	62.06%	128'018.73	37.94%	<b>337'424.68</b>	<b>100.00%</b>
Partner Companies in India	0.00	0.00%	914'977.19	100.00%	<b>914'977.19</b>	<b>100.00%</b>
Divers	0.00	0.00%	174'623.00	100.00%	<b>174'623.00</b>	<b>100.00%</b>
<b>TOTAL</b>	<b>1'936'652.14</b>	<b>54.27%</b>	<b>1'632'094.92</b>	<b>45.73%</b>	<b>3'568'747.06</b>	<b>100.00%</b>
<b>2012</b>						
SkillSonics India	389'955.00	100.00%	0.00	0.00%	<b>389'955.00</b>	<b>100.00%</b>
Swissmem (partly out-sourced to SkillSonics CH)	275'416.00	47.35%	306'238.00	52.65%	<b>581'654.00</b>	<b>100.00%</b>
SFIVET	98'065.00	31.00%	218'307.00	69.00%	<b>316'372.00</b>	<b>100.00%</b>
Partner Companies	0.00	0.00%	784'349.00	100.00%	<b>784'349.00</b>	<b>100.00%</b>
Divers	-	-	-	-	-	-
<b>TOTAL</b>	<b>763'436.00</b>	<b>36.84%</b>	<b>1'308'894.00</b>	<b>63.16%</b>	<b>2'072'330.00</b>	<b>100.00%</b>
<b>2013</b>						
SkillSonics India	294'368.00	95.49%	13'894.00	4.51%	<b>308'262.00</b>	<b>100.00%</b>
Swissmem (partly out-sourced to SkillSonics CH)	208'416.00	33.37%	416'184.00	66.63%	<b>624'600.00</b>	<b>100.00%</b>
SFIVET	96'934.00	29.99%	226'234.00	70.01%	<b>323'168.00</b>	<b>100.00%</b>
Partner Companies in India	0.00	0.00%	391'896.00	100.00%	<b>391'896.00</b>	<b>100.00%</b>
Divers	-	-	-	-	-	-
<b>TOTAL</b>	<b>599'718.00</b>	<b>36.39%</b>	<b>1'048'208.00</b>	<b>63.61%</b>	<b>1'647'926.00</b>	<b>100.00%</b>

Table 25: Cost presentation of the Swiss VET Initiative according to financial statement submitted to SERI; costs per project partner and share per public – private contribution

COSTS PER CATEGORY	Public Contribution		Private Sector Contr.		TOTAL	
	CHF	Share	CHF	Share	CHF	Share
<b>(2008) 2009</b>						
Salaries and Fees	690'034.30	70.03%	343'537.90	24.71%	1'033'572.20	42.84%
Travel and Related Expenses	193'306.80	19.62%	14'500.00	1.04%	207'806.80	8.75%
Communication	17'767.60	1.80%	0.00	0.00%	17'767.60	0.75%
Infrastructure, Production, Office/ Admin.	84'162.90	8.54%	10'463.55	0.75%	94'626.45	3.98%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	300'000.00	21.58%	300'000.00	12.63%
Partner Companies in India / CH	0.00	0.00%	596'037.75	42.88%	596'037.75	25.09%
Selection/ Training Teacher&Examiner	0.00	0.00%	92'311.00	6.64%	92'311.00	3.89%
Examination	-	-	-	-	-	-
Divers (Mission, Visits, Events)	0.00	0.00%	33'223.00	2.39%	33'223.00	1.40%
<b>TOTAL</b>	<b>985'271.60</b>	<b>100.00%</b>	<b>1'390'073.20</b>	<b>100.00%</b>	<b>2'375'344.20</b>	<b>100.00%</b>
<b>2010</b>						
Salaries and Fees	561'896.54	80.25%	221'856.25	23.42%	783'752.79	47.57%
Travel and Related Expenses	71'284.83	10.18%	0.00	0.00%	71'284.83	4.33%
Communication	3'965.00	0.57%	0.00	0.00%	3'965.00	0.24%
Infrastructure, Production, Office/ Admin.	63'006.95	9.00%	1'675.80	0.18%	64'682.75	3.93%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	300'000.00	31.66%	300'000.00	18.21%
Partner Companies in India	0.00	0.00%	261'999.03	27.65%	261'999.03	15.90%
Selection/ Training Teacher&Examiner	0.00	0.00%	152'178.00	16.06%	152'178.00	9.24%
Examination	-	-	-	-	-	-
Divers (Mission, Visits, Events)	0.00	0.00%	9'778.00	1.03%	9'778.00	0.59%
<b>TOTAL</b>	<b>700'153.32</b>	<b>100.00%</b>	<b>947'487.08</b>	<b>100.00%</b>	<b>1'647'640.40</b>	<b>100.00%</b>
<b>2011 (-03/2012)</b>						
Salaries and Fees	1'517'224.40	78.34%	513'559.93	31.47%	2'030'784.33	56.90%
Travel and Related Expenses	209'642.40	10.82%	25'961.00	1.59%	235'603.40	6.60%
Communication	115'255.24	5.95%	0.00	0.00%	115'255.24	3.23%
Infrastructure, Production, Office/ Admin.	94'530.10	4.88%	2'973.80	0.18%	97'503.90	2.73%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	0.00	0.00%	0.00	0.00%
Partner Companies in India	0.00	0.00%	914'977.19	56.06%	914'977.19	25.64%
Selection/ Training Teacher&Examiner	0.00	0.00%	92'489.00	5.67%	92'489.00	2.59%
Examination	0.00	0.00%	16'711.00	1.02%	16'711.00	0.47%
Divers (Mission, Visits, Events)	0.00	0.00%	65'423.00	4.01%	65'423.00	1.83%
<b>TOTAL</b>	<b>1'936'652.14</b>	<b>100.00%</b>	<b>1'632'094.92</b>	<b>100.00%</b>	<b>3'568'747.06</b>	<b>100.00%</b>
<b>2012</b>						
Salaries and Fees	428'950.00	56.19%	460'511.00	35.18%	889'461.00	42.92%
Travel and Related Expenses	106'359.00	13.93%	18'204.00	1.39%	124'563.00	6.01%
Communication and Events	26'127.00	3.42%	7'273.00	0.56%	33'400.00	1.61%
Infrastructure, Production, Office/ Admin.	202'000.00	26.46%	422'906.00	32.31%	624'906.00	30.15%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	400'000.00	30.56%	400'000.00	19.30%
<b>TOTAL</b>	<b>763'436.00</b>	<b>100.00%</b>	<b>1'308'894.00</b>	<b>100.00%</b>	<b>2'072'330.00</b>	<b>100.00%</b>
<b>2013</b>						
Salaries and Fees	326'896.00	54.51%	477'916.00	45.59%	804'812.00	48.84%
Travel and Related Expenses	79'369.00	13.23%	24'707.00	2.36%	104'076.00	6.32%
Communication and Events	32'953	5.49%	4'613.00	0.44%	37'566.00	2.28%
Infrastructure, Production, Office/ Admin.	160'500.00	26.76%	140'972.00	13.45%	301'472.00	18.29%
Intellectual Property Swissmem/SFIVET	0.00	0.00%	400'000.00	38.16%	400'000.00	24.27%
<b>TOTAL</b>	<b>599'718.00</b>	<b>100.00%</b>	<b>1'048'208.00</b>	<b>100.00%</b>	<b>1'647'926.00</b>	<b>100.00%</b>

Table 26 Cost presentation of the Swiss VET Initiative according to financial statement submitted to SERI; costs per category and share per category

COSTS PER CATEGORY	Public Contribution		Private Sector Contr.		TOTAL	
	CHF	Share	CHF	Share	CHF	Share
<b>(2008) 2009</b>						
Salaries and Fees	690'034.30	66.76%	343'537.90	33.24%	1'033'572.20	100.00%
Travel and Related Expenses	193'306.80	93.02%	14'500.00	6.98%	207'806.80	100.00%
Communication	17'767.60	100.00%	0.00	0.00%	17'767.60	100.00%
Infrastructure, Production, Office/ Admin.	84'162.90	88.94%	10'463.55	11.06%	94'626.45	100.00%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	300'000.00	100.00%	300'000.00	100.00%
Partner Companies in India / CH	0.00	0.00%	596'037.75	100.00%	596'037.75	100.00%
Selection/ Training Teacher&Examiner	0.00	0.00%	92'311.00	100.00%	92'311.00	100.00%
Examination	-	-	-	-	-	-
Divers (Mission, Visits, Events)	0.00	0.00%	33'223.00	100.00%	33'223.00	100.00%
<b>TOTAL</b>	<b>985'271.60</b>	<b>41.48%</b>	<b>1'390'073.20</b>	<b>58.52%</b>	<b>2'375'344.20</b>	<b>100.00%</b>
<b>2010</b>						
Salaries and Fees	561'896.54	71.69%	221'856.25	28.31%	783'752.79	100.00%
Travel and Related Expenses	71'284.83	100.00%	0.00	0.00%	71'284.83	100.00%
Communication	3'965.00	100.00%	0.00	0.00%	3'965.00	100.00%
Infrastructure, Production, Office/ Admin.	63'006.95	97.41%	1'675.80	2.59%	64'682.75	100.00%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	300'000.00	100.00%	300'000.00	100.00%
Partner Companies in India	0.00	0.00%	261'999.03	100.00%	261'999.03	100.00%
Selection/ Training Teacher&Examiner	0.00	0.00%	152'178.00	100.00%	152'178.00	100.00%
Examination	-	-	-	-	-	-
Divers (Mission, Visits, Events)	0.00	0.00%	9'778.00	100.00%	9'778.00	100.00%
<b>TOTAL</b>	<b>700'153.32</b>	<b>42.49%</b>	<b>947'487.08</b>	<b>57.51%</b>	<b>1'647'640.40</b>	<b>100.00%</b>
<b>2011 (-03/2012)</b>						
Salaries and Fees	1'517'224.40	74.71%	513'559.93	25.29%	2'030'784.33	100.00%
Travel and Related Expenses	209'642.40	88.98%	25'961.00	11.02%	235'603.40	100.00%
Communication	115'255.24	100.00%	0.00	0.00%	115'255.24	100.00%
Infrastructure, Production, Office/ Admin.	94'530.10	96.95%	2'973.80	3.05%	97'503.90	100.00%
Intellectual Property Swissmem/ SFIVET	-	-	-	-	-	-
Partner Companies in India	0.00	0.00%	914'977.19	100.00%	914'977.19	100.00%
Selection/ Training Teacher&Examiner	0.00	0.00%	92'489.00	100.00%	92'489.00	100.00%
Examination	0.00	0.00%	16'711.00	100.00%	16'711.00	100.00%
Divers (Mission, Visits, Events)	0.00	0.00%	65'423.00	100.00%	65'423.00	100.00%
<b>TOTAL</b>	<b>1'936'652.14</b>	<b>54.27%</b>	<b>1'632'094.92</b>	<b>45.73%</b>	<b>3'568'747.06</b>	<b>100.00%</b>
<b>2012</b>						
Salaries and Fees	428'950.00	48.23%	460'511.00	51.77%	889'461.00	100.00%
Travel and Related Expenses	106'359.00	85.39%	18'204.00	14.61%	124'563.00	100.00%
Communication and Events	26'127.00	78.22%	7'273.00	21.78%	33'400.00	100.00%
Infrastructure, Production, Office/ Admin.	202'000.00	32.32%	422'906.00	67.68%	624'906.00	100.00%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	400'000.00	100.00%	400'000.00	100.00%
<b>TOTAL</b>	<b>763'436.00</b>	<b>36.84%</b>	<b>1'308'894.00</b>	<b>63.16%</b>	<b>2'072'330.00</b>	<b>100.00%</b>
<b>2013</b>						
Salaries and Fees	326'896.00	40.62%	477'916.00	59.38%	804'812.00	100.00%
Travel and Related Expenses	79'369.00	76.26%	24'707.00	23.74%	104'076.00	100.00%
Communication and Events	32'953.00	87.72%	4'613.00	12.28%	37'566.00	100.00%
Infrastructure, Production, Office/ Admin.	160'500.00	53.24%	140'972.00	46.76%	301'472.00	100.00%
Intellectual Property Swissmem/ SFIVET	0.00	0.00%	400'000.00	100.00%	400'000.00	100.00%
<b>TOTAL</b>	<b>599'718.00</b>	<b>36.39%</b>	<b>1'048'208.00</b>	<b>63.61%</b>	<b>1'647'926.00</b>	<b>100.00%</b>

Table 27: Cost presentation of the Swiss VET Initiative according to financial statement submitted to SERI; costs per category and share per public – private contribution

## A-9 Guidelines by the Government of India (Dual System)

1

No. DGET-19(5)/2012-CD  
Government of India  
Ministry of Labour & Employment  
Directorate General of Employment & Training

Shram Shakti Bhawan, New Delhi  
Dated: 21<sup>st</sup> May, 2012  
23rd

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21.15/12

1. Secretaries/ Principal Secretaries of all the State Govts. / UT Administrations dealing with Vocational Training

2. Directors dealing with Vocational Training of all States/ UT Administrations

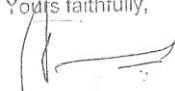
3. Director, ATI Chennai, Hyderabad, Mumbai, Kolkata, Kanpur, Ludhiana, CSTARI Kolkata, ATI (EPI) Hyderabad & Dehradun, FTI Bangalore & Jamshedpur and NIMI Chennai

4. RDAT Kanpur, Mumbai, Kolkata, Chennai, Faridabad & Hyderabad

**Subject: Dual System of Training in Government and Private ITI(s).**

Sir/Madam,

- The 40<sup>th</sup> meeting of the National Council for Vocational Training (NCVT) under the Chairmanship of Hon'ble Minister of Labour & Employment was held on 16<sup>th</sup> December, 2011. Dual system of training in Government and Private ITI(s) was discussed as Agenda item No. 4003.3.
- In Dual System practical training is conducted in the industry and theoretical training in the institutes. The skills and theory are taught strictly according to syllabus prescribed.
- The Council approved the proposal to introduce Dual System of Training in Government and Private ITI(s) under Craftsmen Training Scheme as an option, and this option shall be available only for institutes against their affiliated trade units.
- Government of India has accepted the above recommendations of the council. Accordingly, Dual System of Training is being introduced in Government and Private ITI(s) under Craftsmen Training Scheme as an option. The procedure which should be adopted by Government and Private ITIs & Industries / Industrial clusters willing to join in Dual System of Training is annexed (as Annexure 'A').
- Accordingly, Directors of all the States and Union Territories dealing with Craftsmen Training Scheme are requested to issue further necessary instructions to all Government and Private ITIs of their respective State/UTs. Any Government and Private ITIs desirous of conducting training under dual system may be allowed to do so and their detail may be sent to this Directorate General.

Yours faithfully,  
  
(D. Mallick)  
Director of Training  
Member Secretary, NCVT

Contd/-2



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Annexure 'A'

- i. The Government and Private ITIs which are affiliated with NCVT may tie up with the industries / Industry clusters including MSME (Micro Small & Medium Enterprises) cluster. If one industry does not have capacity to engage students of whole unit, cluster of industries may be clubbed.
- ii. In both the above (i) and (ii), theory classes including basic skills will be taught in the institutes minimum two days a week.
- iii. Curriculum of CTS (Craftsmen Training Scheme) shall be followed.
- iv. Trainees will be admitted in the institutes only in NCVT affiliated trades/units.
- v. The institute will identify industry / industry cluster relevant to the trade for training of trainees.
- vi. Trainees shall be on roll of the institute even when they are working in the industry. The institute will be the main custodian.
- vii. The institute shall be responsible for any health hazard, accident, safety etc. Trainees shall be insured against accident etc.
- viii. Trainees shall undergo training in the industry in general shifts only.
- ix. The institutes will provide free conveyance for transportation of the trainees between institute and industry.
- x. Training in the industry, will be according to the trade syllabus and will be aligned with the post training job profile of the trainee only.

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