



Project ISSTE

***Improving Safety and Security in public surface
Transport***

Final Report

Public Part

Project information

Project acronym: ISSTE

Project title: Improving Safety and Security in Public Surface Transport

Project number: 2007 – 1974 / 001 – 001 LE3-MULPRO

Sub-programme or KA:

Project website: www.isste.eu

Reporting period: From 01/11/2007
To 31/03/2010

Report version: draft version

Date of preparation: 24/05/2010

Beneficiary organisation: ATAC SpA

Project coordinator: Mr. Marino Lizza

Project coordinator organisation: ATAC SpA

Project coordinator telephone number: +39.06.46954360

Project coordinator email address: marino.lizza@atac.roma.it

This project has been funded with support from the European Commission.

This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Executive Summary

The project aims at achieving new, higher, innovative qualitative performances in terms of safety and security related to the surface public transportation sector by the vocational skills' and curricula development of the human resources involved in the field. The project's structure reflects the strategic scope: the new, higher and innovative qualitative performances will be reached by the study, analysis, selection, development, implementation, testing, dissemination and exploitation of innovative vocational training methods, procedures and paths capable of substantially increase the vocational ability skills of the human resources dedicated to surface transport, thus establishing the best innovative procedures for curricula development. The project's development and outcome will be quantified by the establishment of new key performance indexes applicable to the specific field. Comparisons between higher standards achieved by the consortium, in terms of safety and security in public surface transport, and the contextual framework analysis developed in the early phase of the project's lifetime will be investigated and disseminated. The work plan may be divided into four main areas:

- 1) International cooperation for the definition of innovative vocational training procedures: training curricula development, procedures' definition, design of the innovative procedures step by step.
- 2) International cooperation for the development of innovative key performance indexes added to new quality certification methods and standards, in order to be able to quantify the higher qualitative standards delivered and to be able to underline to the market and all transport's stakeholders the new levels of skills achieved by the human resources dedicated to the public transportation sector attending the procedures established in area 1.
- 3) Implementation, testing and evaluation. Adaptation and testing of the developed vocational developing material according to specific partners' needs and priorities. Partners involved in the testing phase, according to specific needs and specific contextual national framework, will implement, test and evaluate a selected variety of innovative procedures
- 4) Dissemination and exploitation of results activities: after the implementation activity has taken place, the consortium will gather all information regarding the testing activity, apply the new key performance delivering a simplified and quantified project's outcome to be disseminated and exploited across nations and across generations. The quantified results will be easily transferable: the disseminating and exploiting activities will be pursued on European and national level. The project's outcome will be disseminated on a global scale through the establishment of an ISSTE project Web-site.

Project ISSTE has been selected among the good practices presented at I & I days event (www.i-and-i-days.eu).

The I & I days project, led by the European Transport Workers' Federation (ETF) and the European Committee of UITP, with the collaboration of the AFT, consists in sharing information and good practices around the directive 2003/59/EC on the initial qualification and periodic training of drivers.

The event took place in Brussels, 4 & 5 February 2010. There were participants from 22 European country, representing Ministries of Transport, Transport Companies Associations and other Key actors.

This event aimed to:

- Identify prerequisites to implement the Directive in the urban transport through a survey carried out with the social partners and ministerial representatives;
- Set-up co-operation and interchange networks on the basis of good practices in the fields of initial and continuing training, and social dialogue, inter alia;
- Draw up recommendations of the European social partners involved in this joint initiative.

Table of Contents

- 1. PROJECT OBJECTIVES..... 6
- 2. PROJECT APPROACH 8
- 3. PROJECT OUTCOMES & RESULTS..... 10
- 4. PARTNERSHIPS 23
- 5. PLANS FOR THE FUTURE 24
- 6. CONTRIBUTION TO EU POLICIES 26
- 7. EXTRA HEADING/SECTION 28

1. Project Objectives

The project aim is mainly based on the research, analysis, selection, implementation, testing and dissemination of innovative vocational training methods, procedures and paths capable of substantially increase the vocational ability skills of the human resources dedicated to surface transport, thus establishing the best innovative procedures for curricula development. This implies that human resources dedicated to the surface transport will be able to comply with innovative skills' forthcoming procedures that are still to be developed and their establishment will be based on the specific crucial issues of surface transport in Europe today.

In this area European added value was be delivered by:

- a) innovation in procedures: the innovative curricula and skills implementation
- b) procedures may be easily personalized and adopted across countries and across generations according to specific needs;
- c) new potentials in curricula and vocational development for human resources dedicated to surface transport,
- d) less incidence impacts in surface transport achieving one of the main European political priorities,
- e) increased awareness in relation to critical European issues that aim at establishing a sustainable surface transport: environmental-friendly impact, efficiency in the use of resources, etc.;
- f) increased image and competitiveness of European public transport;
- g) increased level of safety and security. It is clear that procedures established by ISSTE will substantially change the behavioural attitude human resources, in fact they will be led towards anticipating operative risks, promote qualitative excellence in delivering transport public services, customer satisfaction prospective, efficient use of resources, skills and competence development: two innovative higher goals will be reached such as increasing safety and security while addressing qualitative excellence and customer satisfaction, establishing a virtual mechanism pushing European transport towards a logic of continuous innovation through the strong impact of the ISSTE disseminating and exploiting activities implemented, making the European public transport beneficiate from ISSTE as a whole.

Therefore, on this regard value added and innovation was delivered on an integrated mode:

1. higher qualitative standards in terms of safety and security,
2. new certification methods capable of certifying the new potentials,
3. an increased image for the companies that achieve the higher qualitative standards,
4. an increased image for European transport.

As a consequence, objectives are as follows.

Overall objectives

The project aimed to:

- contribute to the development of quality lifelong learning and to promote high performance, innovation and a European dimension in systems and practices in the field of safety and security related to the surface public transportation.

- support the realisation of a European area for lifelong learning.
- encourage the best use of results, innovative products and processes and to exchange good practices in the fields of safety and security related to the surface public transportation.
- improve the quality and increase the volume of co-operation between institutions or organisations providing learning opportunities, enterprises, social partners and other relevant bodies throughout Europe
- facilitate the development of innovative practices in the field of vocational education and training in the field of safety and security related to the surface public transportation.
- support participants in training and further training activities in the acquisition and the use of knowledge, skills and qualifications to facilitate personal development.

Specific objectives

The projects aimed to increase the Safety and Security in Public Surface Transport by improving the vocational skills' and curricula development of the human resources involved in the field.

In particular, focus on drivers' ability enhancement will be implemented as follows:

- to assess a clear picture of the safety and security needs related to the surface public transportation.
- to develop the consequent Framework Analysis of Safety and Security in European Public Surface Transport
- to identify and consolidate the Key Performance Indicators
- to design an innovative and efficient training curriculum on safety and security related to the surface public transportation.
- to test the training procedure within PT companies (RATB and ATAC)
- to evaluate the training procedure
- to diffuse the results

2. Project Approach

Background

Globalisation exposes transportation and traffic safety to severe vulnerability. The European Commission has estimated that in the UE countries, the cost for the road traffic injuries is €160 billion which is about the 2% of the UE Gross Domestic Product. Each European citizen pays for road traffic injuries a tax charge average rate of € 427 per year.

Pedestrians and cyclists using roads are particularly at risk. Crashes are frequent. Deaths and injuries are common. The number of people killed and injured on the world's roads could rise by more than 60% between 2000 and 2020. In addition, a specific concern regarding surface public transport has to be outlined: for every incident that occurs, transport companies have enormous impacts on the service delivered: reduced number of bus lines available, costs for legal affairs, decreased reliability of public transport, insurance indirect costs, etc.

In Italy, more of the 50% of victims from fatal road accidents are persons under 41 years old and 25% of them are young persons under 23 years old.

Based on the UE directives, the Italian National Plan for Traffic Safety (INPTS) aims to reach for the year 2010 a 40% reduction of fatalities and diseases caused by road accidents. The level of safety on the roads is influenced and determined by cultural, social, educational, behavioural factors. A sustainable transport system implies changes in behaviour and new innovative approaches at all levels of society and sectors of the economy. Important prerequisite for realising a sustainable environment transport system in the long term are conformity with ecological limits and the prevention of pollution. Several measures are useful to change the transport behaviour of individuals. In particular they are referred to the movement of people with special consideration to: - More careful driving, - Shifting from the car to public transport, - Education: training drivers in eco-efficient driving. The main behaviours, included changing attitudes, culture, ways of living and acceptance of strong measures, are: - Raising public awareness of traffic-related environmental impacts, incorporation of environment impact and sustainable mobility into teaching materials, - Environmentally Sustainable Transport instruction in schools, - Special training especially related to respect the CO² levels in urban areas. A high-quality driver training programme needs also to show how to anticipate risks and how to avoid them. The training of trainers has to be considered as a very important activity not only merely technical or judicial, but mainly social.

Project mission

It is clear, therefore, that in order to reduce incidence ISSTE seeks to overcome the main constraints and to fulfil the main needs that characterize the surface public sector currently: these constraints may be summarized in the total absence of procedures that make human resources involved in the field aware of the operative risks related to delivering the service, procedures that try to stimulate their working excellence, procedures that teach how to intervene in emergency situations, that make drivers anticipate risks, that make trainers obtain new competences and better tools in order to transfer their knowledge to the companies' "new entrees", that

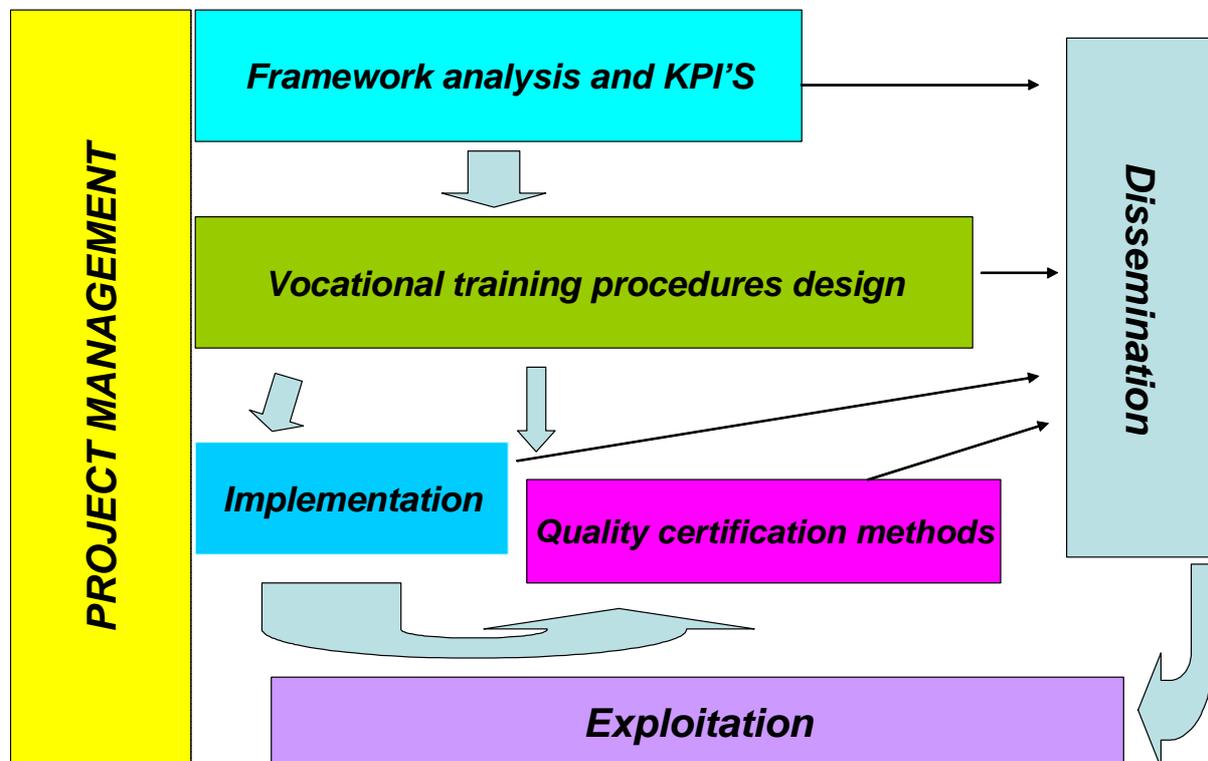
illustrate and disseminate the need for an efficient use of resources, that transfer the importance of learning as the main tool for personal development, that increase technical skills in the prospective of reducing fatalities and injuries, that make human resources internalize the European goals of promoting excellence and increasing the image of Transport throughout the world. In addition, ISSTE methodologies will be transferred across nations and across generations, and this will allow European transport to beneficiate from ISSTE as a whole: this means that other transport companies will be able to implement the innovative procedures facing no constraints, while technological innovations, other main tool that addressed safety and security features, are subordinated to copyrights and brand issues.

Project Approach

In order to achieve the necessary efficiency and accuracy, the project is divided in the following Work Packages:

- WP1: Project Management
- WP2: Contextual FrameWork Analysis and Key Performance indicators
- WP3: Innovative vocational skills and curricula developing methods and procedures design
- WP4: New certification of quality methods
- WP5: Quality testing and Implementation
- WP6: Dissemination of results activity
- WP7: Exploitation of results

The graphical flow chart representation as follows.



3. Project Outcomes & Results

The Project produced the following outcomes.

WP2: Contextual Framework Analysis and Key Performance indicators.

In this WP2 of the ISSTE project the Partners, leader ASIA Onlus, have analysed several statistical data on various surface transport databases, looking for incidence, cause and typology of accidents on the European roads. A SWOT analysis was designed and implemented, looking for the strengths, weakness, opportunities and threats all over the Member States of the Partners. A Consultation Questionnaire was developed aimed at collecting data from every potential source of interest for the ISSTE Consortium: transport organisations, associations, operators, companies, and institutions.

The quantitative and qualitative data collected were elaborated by using electronic datasheets, studied and reorganised in order to individuate the right innovative key performance system of indexes capable of significantly reduce the data existing in the surface transport companies into synthetics qualitative and quantitative indicators aimed to facilitate the decisional process for managers, authorities and government.

A system of innovative key performance indexes was developed and the results will be applied in order to quantify and obtain a clearer prospective of the current situation in terms of safety and security in public surface transport in the consortium's context.

The work package's outcomes constitute the input for next WP in order to configure priorities to which address and focus the vocational and curricula developing training activities' research, according to specific and crucial issues for the consortium's referring framework context.

A comparative work has been started and the added value may be found in:

- a) Quantification of the current European level of safety and security,
- b) Innovative key performance indexes,
- c) Quantification and dissemination of the effectiveness of the vocational training procedures and their impact in terms of incrementing safety and security.

Within the WP2, partners carried out a research in order to find the Key Performance Indicators relevant to the transport company in the area, which serves as a basis for the later WPs regarding the situation of public surface transport.

WP3: Inno Innovative vocational skills and curricula developing methods and procedures design

This Work Package, leaded by RATB, identified the necessary abilities for drivers and trainers, taking into consideration that the public transport drivers play a fundamental role in ensuring passengers' safety and security.

First of all, a list of job tasks (roles) and job requirements for drivers was set, in order to define the most important issues that could be improved by applying new training procedures.

Two aspects were considered as being very important:

- ensuring passengers' safety is always more important than complying with schedules,
- working environment for drivers, respectively the context within urban public transport drivers work and implement their skills.

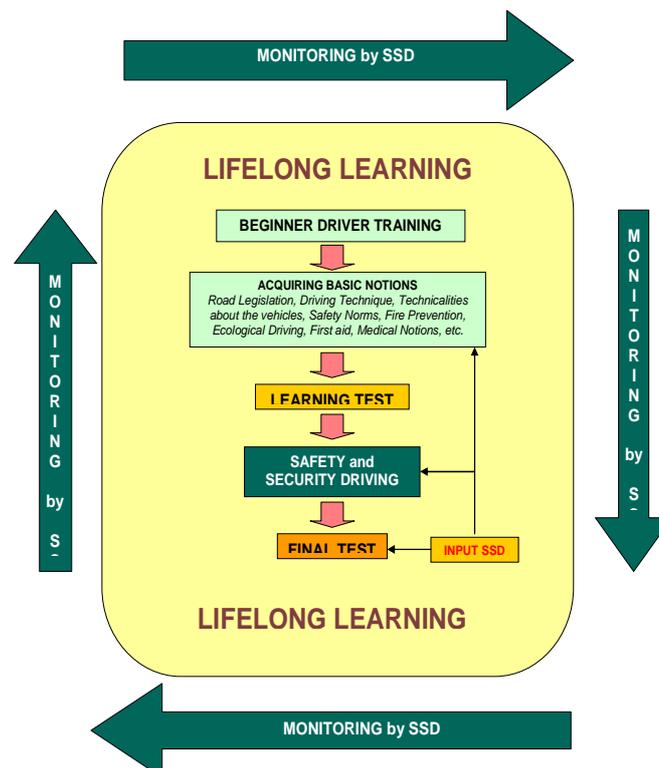
After establishing the roles and requirements of this job, essential skills, knowledge and attitudes for drivers were identified. These are elements that have been taken into consideration when the new curriculum has been designed in order to improve the necessary skills for drivers.

Moreover, the most important knowledge and abilities for trainers were also identified.

In order to draw up innovative curricula, it was designed a Questionnaire, comprising 66 questions. This questionnaire was filled in by all ISSTE partners, in order to collect data from the ISSTE consortium regarding the learning process of the public transport drivers. The quantitative and qualitative data collected were studied and analysed in order to acquire the best information regarding the actual learning process of the public transport drivers. Based on this information, WP produced the National Report in order to assess the status of public transport training process in ISSTE countries. The National Report provides, by comparison, the methods used in partner countries, without considering that they are the only or the best methods.

The proposed innovative curriculum focused on Safety and Security comprises 6 modules and includes only the elements regarding the specific items that will be assimilated in the training process. This curriculum has the role to improve the driver's skills and performances.

The aims of this training curriculum should be the increasing of the safety and the consciousness while driving a public transport vehicle and to help the adoption of these procedures in case of risk and also to prevent mistakes while driving.



It is compulsory to have a minimum knowledge (on Road Legislation, Technical Knowledge about the vehicles, Safety Norms, Fire Prevention etc.) in order to attend the specific training proposed.

With the objective of satisfying the different training needs of each country, 2 ways in which that curriculum should be tested there were suggested:

1st - One approach can be the implementation of this Safety and Security Training Curriculum separately from the original / basic Driver Training Curricula, at the end of the training period, after testing the driver (learning test) in order to be sure that he/she has acquired the minimum knowledge's and abilities compulsory for the public transport drivers.

2nd - The other approach can be the implementation of this Safety and Security Training Curriculum within the Driver Training Curricula, integrating the elements of the S&S Training Curriculum to the basic training.

The number of hours for each module of the Safety and Security Training Curriculum are suggested (in brackets) and not imposed. This number of hours will be at the training department's choice, according to their needs, trainees' level of knowledge and abilities, the feedback of the SSD departments, etc.

After finishing the 6th modules of the Safety and Security Driving Training, these modules containing only those elements considered being very important for a future safety driving in the public transport service, a final test will be performed.

This final test should supply continuous inputs to the basic training and also for updating the Safety and Security Training Curriculum. Based on these inputs, the training department could choose to integrate the elements considered delicate to the safety and security in the basic/ usual curricula of the public transport drivers, updating continuously the curricula.

A Safety and Security Department (SSD) within the Public Transport Company could also supply inputs for training planning by normative updating, traffic incidents statistics and specific thematic research (Stress, Ecological Driving, Traffic Incidents etc.). By this way the training on Safety and Security becomes more focused and effective.

WP4: New certification of quality methods

The main goal of the project in WP4 is to improve safety and security by employing a good strategy for drivers' instruction and certification methodologies.

While the new technologies and equipment has improved and helped the drivers in performing their tasks on the road, the knowledge is the key factor that is needed for getting higher performances in traffic behaviour. The public transport drivers have much more responsibilities and stresses in traffic:

- they carry a large number of persons;
- their vehicle is usually harder to manoeuvre and has a bigger inertial behaviour;
- the dimensions of the vehicle are larger than main of the other traffic vehicles, sharing the same carriageway;

- the driver has to face several challenges: to carefully monitor the passengers in stations and/or in the vehicle, while driving;
- the driver must deal with different emergency situations etc.
- Therefore, they have to learn more about the behaviour in traffic and in the relationship with the passengers. From the point of view of the trainers of these drivers, there are several risk factors in the public transport:
 - Traffic congestion due to private vehicles and absence of own paths, signal prioritisation – how do you deal with them, when driving a big bus in the city?;
 - Extensive demand for public transport in peak hours or special events – how do you deal with public and travellers?;
 - Traffic incidents and accidents involving public transport vehicles – which are the most appropriate and first measures to undertake in such cases? How does the onboard equipment of a PTV¹ help?;
 - Social incidents [aggressions, people (including drivers) behaviour, terrorist actions] – Which are the best behavioural procedures, which are the authorities that are to be involved?;
 - PTVs, infrastructure, operation etc. failures: to deal with modern technology; The low integration level of new emerging technologies has to be raised (Centralised Public Transport Management, traffic detection and pre-emption, security systems etc.);
 - Quality of service given to public – how can it be assessed and certified?;
 - The low level of education for the drivers, in terms of using the advantages of new technologies for transport improvement, network operation, behaviour in case of incidents etc.). – must be also improved etc.

These risk factors are milestones of curricula that must be covered and then examined in terms of behavioural procedures.

Role of leading partner (UPB-CEPETET) in WP4

- Assess the current status of the transports in terms of certification methods, knowledge, good practices in transports training, education and evaluation of personnel;
- Assess the dimension of the human resources in Romanian surface transport sector and identify new or improved methods for certification and deliverance of good quality in transports;
- Manage the Work Package 4, identify good practices and prepare a report for Romania; compile reports from other partners and disseminate results;

P4 UPB-CEPETET is closely collaborating with RATB, which is the first and biggest public surface transport operator in Romania. All important issues regarding training of the drivers, connections with traffic behavior and special conditions of safety and security are discussed previously with this partner, due to its experience in the field.

The expertise of other partners in the ISSTE project is also crucial, in order to find the best solutions, in terms of training, evaluation and certification of public transport staff.

¹ Public Transport Vehicle

Activities in WP4

The main on going activities in this WP were the following:

- evaluation of the existing and applied methodologies for training – seeking for the common issues and particular ones;
- evaluation of the existing and applied standards;
- elaboration of recommendations for harmonizing the existing standards;

In order to gather information regarding the educational / certification and accreditation methodologies, WP4 has elaborated a specific questionnaire, which has been distributed to all partners in the project.

Some of the questionnaires' items developed and analysed in this period are:

- General assessment of the training processes for surface transport companies:
 - Methodologies, criteria, procedures, standards and indicators for quality of education;
 - Methodologies, criteria, procedures, standards and indicators for trainees;
 - Rules for trainers' performances evaluation;
 - Rules for effects in improvement of safety and security of surface public transport evaluation;
 - Education quality assessment;
 - Building a Community Transport Training Network for the surface public transport;

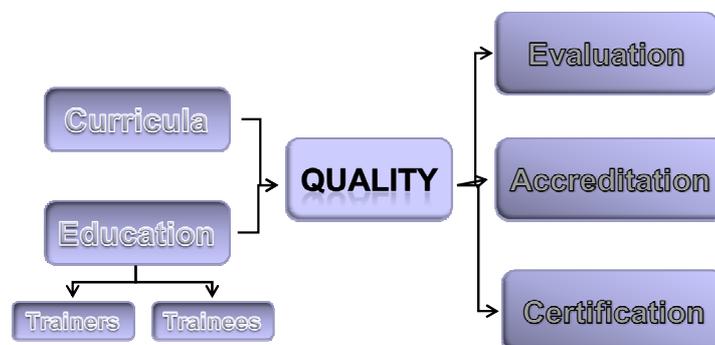
WP4 analysed the results of the questionnaire responses and will find the best practices in drivers' training certification and quality methods.

Considering the training and the educational process of the PTV drivers as a crucial one, the feedback of this process will be taken into consideration, in terms of certification and quality methodologies.

There is a specific chain that is also to be taken into account, formed of the following actions in the training / certification process:

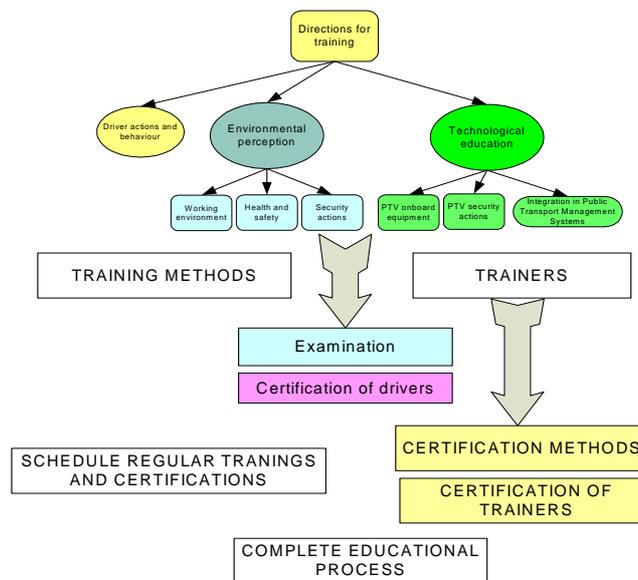
- the evaluation;
- the accreditation;
- the certification.

All of these rotate around the principle of *QUALITY*, which must be the foundation for all of them. But the concept of quality in this context is provided by two sources: curricula and education. Not only the trainees, but also the trainers are part of this process, as depicted in the figure below.



Based on the results obtained from the questionnaire and the research performed by WP4, in cooperation with all partners in the project, it designed a new approach for increasing the role of education in improving safety and security in surface public transport.

The WP4 “New Quality Certification Methods” was very closely dependant on other WPs. This WP is seen in a feedback relationship with Contextual Framework Analysis WP and Innovative Vocational Skills / Curricula Developing Methods Design WP, as depicted in the figure below.



WP5: Quality testing and Implementation

Starting from WP3 inputs, the two PT operators members of the consortium tested the two formulas, as follows:

- ATAC (Rome) planned and implemented a training programme designed around a Safety and Security (acronym S&S) module, just after the basic learning. The training started in mid June, till the end of the same month.

and

- RATB (Bucharest) connected the training S&S DRIVING TRAINING INNOVATIVE CURRICULUM within its own training program of the Professional Training Department. The training began on the 1st of June.

The specific objectives of the S&S training were to dramatically raise bus drivers' competences in the main following areas of expertise:

- Protection general measures,
- Causes of injury,
- Alcohol and drugs,
- Specific task co-related risks,
- Work co-related pathologies,
- Prevention measures,
- Theoretic and practical driving rules
- First Aid

One of the key activities of the WP as a whole was the identification and selection of the trainees to be involved.

Strictly following the logic of the two formulas, ATAC and RATB used different methodologies for this task.

ATAC based its selection of bus drivers on three main sophisticated and crossing criteria:

- Corporate age (6 and 17 years of corporate experience)
- Behavioural records (Technical skills, employment and discipline evidence)
- Results obtained on an evaluation questionnaire (to identify the lacks in the S&S knowledge, and, consequently, the need of training)

In this way, the best professional figures, in terms of solid practical experience, adequate flexibility for behavioural change, availability to fruitfully test driving habits, were selected.

On the other hand, RATB driver groups were made up by selecting the trolleybus drivers who registered various traffic events in the last 3 years. For each vehicle driver, was prepared a file with records about his/her traffic events, taking into consideration the event's causes and faults. It was managed in this way in order to have an empirical base for further evaluation of the effects of applying this innovative S&S curriculum.

Several training tools and deliverables were designed and implemented to carry out the training. Together with technical documentation and papers strictly related to the S&S issue, including didactic materials, brochures and booklet, specific tools were produced. In particular, a leaflet was designed and produced (both in English and Italian versions) and distributed to all ATAC drivers. This tool, pocket sized, has the objective to provide an "easy use" vademecum on driving behaviours and S&S. The leaflet is also designed to be included in the equipment on board, to be helpful in case of emergency.

After the training deployment, feed-back of the training process were collected to evaluate the training itself, and it was a very useful tool for improving the training method and also for simplifying the given information. This tool represents a mirror of the training, a possibility for knowing the shortcomings and improving the training process.

Once again, due to the different training formula, ATAC and RATB used partially different evaluation process and tools.

Trainers in ATAC, during the last day, in addition to the deployment of the evaluation questionnaire, launched a debate to discuss and analyze in detail results and gaps between drivers' expectations and goals actually achieved.

Questionnaire verified the acquaintance on subjects treated during the training by questions more detailed than in first level questionnaire, but respecting the same structure for a data comparison. The attendees, except one, had a positive *delta*, i.e. a neat improvement, with an average of 24. Questionnaires analysis demonstrates the value of the training as a tool for the increase of S&S skills and knowledge.

RATB designed 4 sets of assessment questionnaires, and evaluated the 96 trainee's responses at every questionnaire. As far as the final overall evaluation is considered, all trainees answered correctly to more than the minimum trainees admission point, and the majority of them (89.6%) answered correctly to a really significant number of questions. In addition, regarding the training classes evaluation, it was used a qualitative evaluation file which was filled in by every trainee. The trainees clearly expressed their general appreciation for the training,

The training added value was clear in both companies' practical experimentations.

The innovative curriculum achieved in WP3 took into account the drivers skills and knowledge and it was based on the national occupational standards, already including explicit S&S training.

Training on S&S is an essential and primary element for the employment in PT companies. Many information about current regulation on S&S for every task are provided in details at the beginning of the professional career, before including the new employee in his/her department.

WP5 operative planning and implementation were performed coherently to the certification methodology that will be carried out in the following project step. In this way, the WP4 "New Quality Certification Methods", already started and currently suspended due to the training execution, will be able to fulfil at best its mission.

In conclusion, we can affirm that the WP5 confirmed the appropriateness of the previous project outputs. Methodologies and processes developed were coherent with the project mission and produced a positive result in terms of improvement of drivers S&S competences. ATAC ' test showed that the main result was obtained by practical driving section/modules. A special driving circuit was equipped for practical tests on critical driving situations or sudden danger. This driving circuit allowed to evaluate the responsiveness of the attendees. The outcome was extremely positive, because it was proved that experienced drivers need to practice facing sudden or risky situations as well. What is more important, the innovative curriculum is flexible and adaptable to companies' internal training procedures. We consider it as the most important result, in that it ensures the real sustainability of the training proposal and, consequently, the operative chance to replicate it.

As expected, the test showed some areas of improvement. The report clearly mentions these output in that we consider it as the key aspect to help the training customization for PT players. In fact, analyzing the results of the curriculum implementation, other public transport companies can find a new way of tackling and improving safety and security in surface public transport.

The innovations delivered may be imitated, transferred, adopted and implemented by other public transport players (including companies, local and national authorities, legislators, driving schools, etc) according to specific needs.

We can conclude that, the professional training process is very important in order to obtain a service that is viewed in terms of safety, reliability, influencing the inter-modal choice of urban travellers and increasing the relative share of public transport services utilization.

WP6: Dissemination of results activity

The dissemination activities under project ISSTE were implemented according to the provisionally developed and approved by EACEA dissemination plan. The plan was developed in such matter to provide the largest possible dissemination. We have selected the most suitable dissemination activities and have provided the partners the freedom to select the best ones according to their location, culture and target group specifics, something innovative for each partner.

All partners of ISSTE took part in the dissemination activity.

So far we've developed:



website of the project www.isste.eu

brochures of the project as well as a banner

There has been developed a database of suitable beneficiaries of the project results as well as key actors that can provide qualitative feed back on the deliverables.

The project was directly and widely disseminated in the following countries:

- UK
- Italy
- Romania

- Greece
- Slovakia
- Bulgaria
- Germany

Partners assisted the WP leader in the dissemination process. All partners have, or are having, a short description of the ISSTE project posted on their websites. With reference to the ISSTE mission itself and outputs already available, dissemination of this project started during meetings with relevant stakeholders such as the local transport company as well as during other projects in which partners are collaborating.

Some dissemination examples.

- Newsletter ATAC, monthly 10.000 issues, all ATAC employees
- Newsletter ASSTRA (Italia Public Transport Association), monthly, 5.000 issues, all ASSTRA members. Contacts include people working in associated companies, in municipalities and people that joined our newsletter freely on our web site.
- TP, bimonthly, 5000 issues, all ASSTRA members – President and Area Directors and all interested employees, University departments (economy, law and engineer), sector trade unions, institutional figures.
- An ISSTE article in the RATB's newsletter published at the end of January 2008. The RATB's internal newsletter was printed in 350 copies and distributed within RATB departments;
- On 15.09.2008, RATB attended and disseminated the project at a meeting with urban planning and transport specialists from Bucharest and Berlin;
- Presentation of the ISSTE project at the Romanian Road Safety Forum on 14th October 2008;
- The project banner and leaflets were disseminated at the Spicycles Final Conference organized by RATB, at The Chamber of Commerce and Industry of Romania, in Bucharest, on 19th December 2009. This event was attended by approx. 60 international participants. Spicycles project was financed by the European Commission under the 6th Framework Programme.
- in January 2009, a RATB - ISSTE presentation was done for ASTUTE workshop organized at RATB headquarters.
- ISSTE articles in various newsletters / magazines:
 - Article in the URTP newsletter, distributed in electronic version and also on hard copies (100 printed copies) to all Public Transport operators in Romania and to other actors in the Romanian Union of Public Transport - December 2009
 - Article in "TIR Magazine", the magazine of the National Union of the Road Transport in Romania, printed in 10.000 copies - January 2010
 - Article in "Metropolitan Club", the bilingual monthly magazine of the Public Transport Business, printed in 3600 Romanian copies and 1800 English copies, distributed to public and private public transport actors, commerce chambers, equipments and services suppliers, etc. - January 2010. The article was also posted on the website www.clubmetropolitan.ro
- An ISSTE article (containing news and results of the project) was also transmitted to:
 - CISR (Inter Ministerial Council for Road Safety)

- IFPTR (Professional Institute for Road Transport Training)
- AVAC (Victims Association of Traffic Accidents)
- 1/ Project Media (Radio) presentation on the most listening national station “Slovak Radio 1“, relation for motorism and drivers „Pozor zákruta !“ on Friday, 25th of July 2009, 13:00-14:00. Less then 10 minutes direct speech.
- ISSTE Project presentation at Conference of the Association of public transport operators in city agglomeration in the Slovak republic. Including Power Point and banner preparation
- September 2009, realisation on 25th of September 2009 (Bojnice)– participation of 40 persons
- Realisation on December 4th, 2009 (Bešeňova) – participation of 25 persons
- Burgas (Bulgaria), March Put a link on the Website – www.scabq.net
- Burgas, (Bulgaria), 8 May 2009 European Projects day organized by Municipality of Burgas. Presentation of the project ISSTE
- Gabrovo (Bulgaria), 22 June 2009 Municipality of Gabrovo – International conference.
- Burgas (Bulgaria), 18 July 2009 Presentation of ISSTE results on a conference organized by Global Environment Fund – discussion with the Management body of the Fund in Bulgaria for transfer of the innovation.
- Athens, Greece, 20.09.2009, Presentation of ISSTE products on transnational meeting under Project TCSPD
- Burgas (Bulgaria), 15-16.12.2009, Organisation of International Seminar in Burgas with guests from the Bulgarian Ministry for Regional Development, Transport Committee, European organizations partners of SCA.
- Sessano del Molise (Italy) 04.02.2010 – Working seminar and presentation of ISSTE project for teachers of the Vocational Training Centres

Project and its results and products were disseminated all over Europe, as detailed, mentioning all activities and tools, in the WP6 DELIVERABLE.

It is important to focus on two main dissemination events.

1. ISSTE presentation among the good practices at I & I days event
2. FINAL CONFERENCE

I & I days event (www.i-and-i-days.eu)

Project ISSTE has been selected among the good practices to be presented in this event.

The I & I days project, led by the European Transport Workers’ Federation (ETF) and the European Committee of UITP, with the collaboration of the AFT, consists in sharing information and good practices around the directive 2003/59/EC on the initial qualification and periodic training of drivers.

The event took place in Brussels, 4 & 5 February 2010. There were participants from 22 European countries, representing Ministries of Transport, Transport Companies Associations and other Key actors.

This event aims to:

- Identify prerequisites to implement the Directive in the urban transport through a survey carried out with the social partners and ministerial representatives;
- Set-up co-operation and interchange networks on the basis of good practices in the fields of initial and continuing training, and social dialogue, inter alia;

- Draw up recommendations of the European social partners involved in this joint initiative.

FINAL CONFERENCE

The Final Conference was held in Rome, organized by ATAC – the project coordinator – at the end of the project, in March 2010.

The mission of this conference was to present and diffuse the project main results, together with project evidences from Consortium partners in the context of their country of origin and local environment.

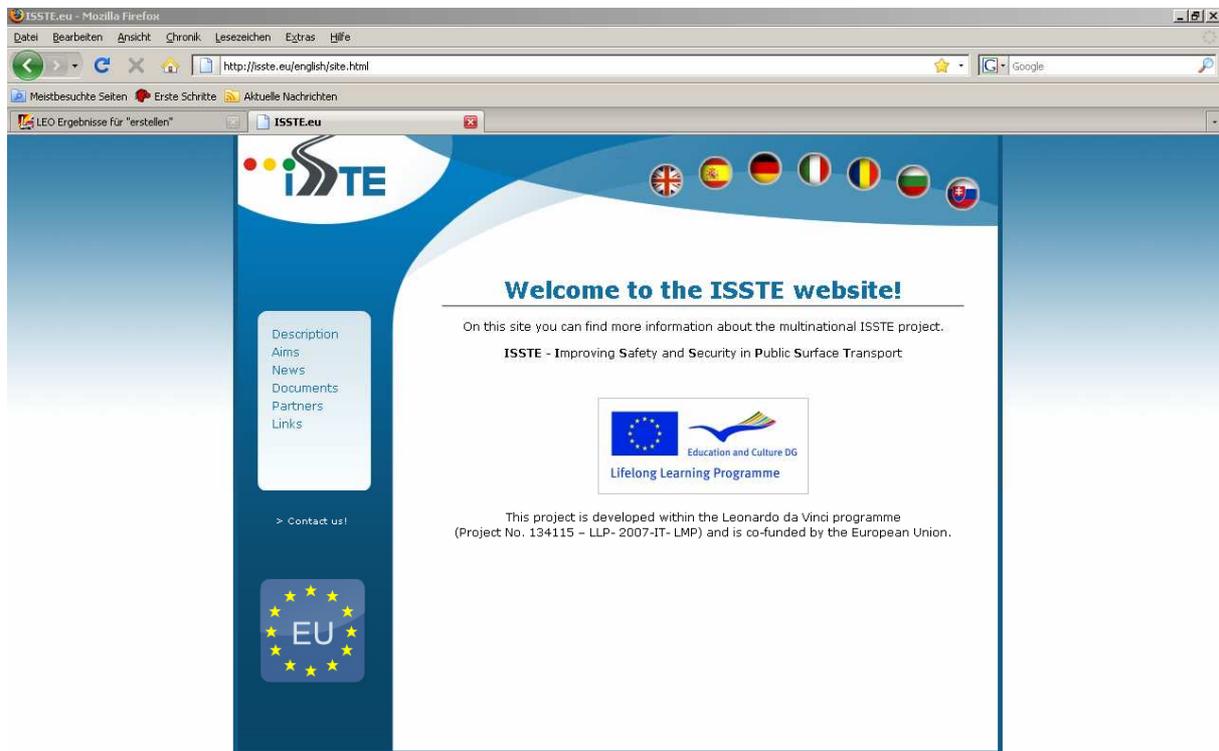
The above mentioned topics represented the scientific and empirical platform on which a following institutional roundtable discussed and developed further matters and issues. The roundtable involved all stakeholders of the safety and security in bus driving topic, representing public transport operators, municipal administrations, ministries of transport European Parliament, road users.

The debate was open-minded and all participants gave their comments not only on the project results, but also in general terms on the issue of safety and security in bus driving.

A total of 168 people participated in the Conference, including attendants representing ministries, municipalities, public transport operators and authorities, associations of passengers, universities and research centres, representatives of civil society groups and observers. The large majority of people came from Italy.

WP7: Exploitation of results

In this WP of the ISSTE-project, leader WBS TRAINING has implemented the essential tool for both national and international exploitation: www.isste.eu.



The project's homepage went online on April, 30th, 2008. In addition, the translated versions of the site are online in each partner's language to assist in their own national dissemination of the results.

The wide diversity of the ISSTE communication tools reflects its objective to be large scale disseminated.

Visitors of the site are able to gather information of the project and the project partners. They are able to contact each national project partner as the project site is linked to their company homepages and all contact information is included.

ISSTE website is externally oriented and offers general information; "static" and "dynamic" information.

The "static" information:

- Description: general information about the project mission

- Objectives: overall and specific objectives description
- Documents: the full collection of documents produced by the project, including abstracts in all partners languages
- Partners: presentation of the members of the consortium

The “dynamic” information:

- News: recent news related to public general public transport issues
- Links: relevant links to other projects, publications, organizations

It is important to underline that, beside the official ISSTE website, a Romanian website of the project www.isste.pub.ro was developed for internal and national dissemination of the project.

ISSTE project was published as safety related project on website of European eSafety Support project www.esafetysupport.org.

4. Partnerships



ATAC SPA: Public Transport Operator in Rome, ITALY



RATB: Public Transport Operator in Bucharest, ROMANIA



WBS Training: German Private Consulting Company, GERMANY



“POLITEHNICA” UNIVERSITY OF BUCHAREST: Transport Faculty, ROMANIA



SECOND CHANCE ASSOCIATION: Bulgarian Public Consulting Company, BULGARIA



ZAS ASSOCIATION: Association of Driving Schools in Slovakia, SLOVAKIA



ASIA ONLUS: VET Organization ITALY



IPF / Iniciativas de Proyectos de Formación: Spanish Consulting Company, SPAIN

5. Plans for the Future

Starting from the end of the project, two main activities will be performed:

1. diffusion and exploitation of results
2. partners' internal exploitation of results and experiences.

Diffusion and exploitation of results

There will be a dissemination of the results from the project, to all those contacts included in the database of partners and those who could be interested in these results, also policy makers and authorities. This will be done via emailing for example, separated by groups such as local and national, and international (collaborating with the responsible partner), as well as by type of activity of the companies / authorities addressed.

The website is complete and it will be active until the 23.04.2013, keeping all needed documentation and advertised in the communications mentioned above. The Exploitation of results will be pursued at national level by the exploitations of abstracts of the reports and deliverables produced in the ISSTE project translated in all partners' languages.

The results of the ISSTE Project will be communicated to other local public transport operators that will be interested in using the ISSTE outcomes.

In long term we expect our deliverables to reach more than 20 000 people, using publications in media, website (project website, partnership websites), participation in events and e-mails etc.

So far we have disseminated our deliverables to more than 500 people, even considering that we just achieved all the project results yet.

The website is one of the key tools of the dissemination activity. The website has been designed to be friendly, clear, easy to navigate. The main language is English, and all information are available in 7 languages: English, Italian, Spanish, German, Romanian, Bulgarian and Slovakian.

Beyond this, on the website all deliverables can be read in English, while abstracts of technical Deliverables were produced and translated in the 7 above mentioned languages. All documents are fully downloadable.

As far as the long term sustainability of the targets is concerned, partners are approaching the ISSTE activities as an intimate part of their internal core development. In other words, results obtained on the basis of the ISSTE project will be automatically included in the partners internal procedures, in order not only to fully benefit from the projects outcomes, but also to communicate the innovative approach in the field of Safety & Security Driving procedures within the business, scientific and institutional Public Transport European community.

Moreover, website dedicated to the I & I Days (www.i-and-i-days.eu) has been updated with the ISSTE slides presented during these days in Brussels. The presentation can be easily found and downloaded (<http://www.i-and-i-days.eu/eng/?page=4>). Once again, this high profile diffusion largely helps the achievement of long term targets on project results dissemination,

Partners' internal exploitation of results and experiences

All partners of the ISSTE consortium share the intimate commitment to include methodologies and results of the project within their daily activity.

In particular, ATAC and RATB, the two operators, will include the S&S specific training designed and tested in the project within their ordinary bus drivers training.

This curriculum was sent to all Romanian Public Transport Operators in order to be used for their future training activities. In RATB the innovative training curriculum produced under ISSTE project will represent the base for initial and periodical training of all public transport vehicles drivers (bus, trams and trolleybus).

6. Contribution to EU policies

The European Commission asserts that indicators of public surface transport have to be related to the economic activities and the European integration².

The competitiveness of the EU economy depends increasingly on the mobility of people, the interdependence of transport infrastructure and on the know how of the labour force.

The Lisbon strategy aims to increase the education levels of people following a life-long learning strategy. Continuing participation in training throughout people's working lives is becoming essential to adapt their competencies to the technological advances. Substantial disparities exist in the education and training of the work force across the EU, at each level of education and in each sector of work.

The work done in the ISSTE follows a methodology aimed to individuate a common set of shared indicators to act on training as a lever to improve safety and security performances of a public transport company without borderlines.

The safety and security in the surface transport tend to overcome the "human error" and assumes the characterisation of a complex theme where a number of different elements have to be integrated and co-ordinated in the ordinary transport process for a "free" mobility of citizens.

Each operator in public surface transport has a knowledge base and a history of successes and failures of safety and security countermeasures that should be shared.

Moreover, the public drivers need to possess, in addition to technical know-how and a natural ability to take decisions in emergency, very strong interpersonal skills. Interdisciplinary work skills are also necessary.

The ISSTE Consortium has devised four composite indicators offering an initial overview of the fields of action to improve the safety and security performances in public surface transport companies in a general context characterised by high levels of interdependence between transport infrastructure, growing sensibility of citizens about sustainability, green technologies, pollution, traffic congestion, stable employment, ergonomic, and others.

A more responding curriculum for safety and security drivers seems emerge and it should be based on technology, focusing both on the use and collaborative design, human behaviour, risk assessment, prevention, and psychology.

New dimensions are opening up for safety and security drivers, but at same time there are increased expectations in terms of the quality of transport performances.

As a result, the project mainly aims to provide its contribution to the White Paper "European transport policy for 2010: time to decide", Brussels, 12/09/2001. COM 2001. In particular, one of the main priorities the EU White Paper: "Managing the effects of transport's globalisation" concerns the educational problems of continuous up-date learning relative to the transport and travelling on the road acting both on the Instructors and Driver-Clients everywhere.

² <http://ec.europa.eu/eurostat>

Beyond this, the innovative curriculum produced by ISSTE Project, will represent a support for a possible European Regulation proposal regarding the training of the public transport drivers. This innovative curriculum is based on the operation experience of two big public transport companies in Europe (RATB and ATAC) and on the know-how of the training institutions / companies engaged in the ISSTE project (SCA, UPB, WBS Training, ZAS Association, ASIA Onlus, IPF).

Ideally the products of this project will be assessed and become part of the European driving system for public transport, although each country in Europe has different training systems and regulations for public transport drivers.

By diminishing the effects of pollution using an eco-driving method assimilated in the training process, the directions regarding the increase of the quality of life from the "Green Paper" will be achieved.

The attractiveness of public transport in European cities will be improved by diminishing the number of traffic accidents through the implementation of this curriculum that aims to enhance the training of the public transport drivers.

We can concluded that, by producing and adopting an innovative curriculum, applicable to the European level, the safety and security of the public transport can be improved, consequently, the attractiveness of public transport will increase, while eliminating the traffic congestions and, last but not least, a healthier lifestyle will be achieved.

7. Extra Heading/Section