



National implementation scenario of ICT-DRV quality indicators for: HUNGARY

prepared by: András Décsi, DEKRA HU, Ing. Tamás Hima, National Transport Authority and Dipl. Ing. Endre Dobrocsi, Director, E-education IT Inc.

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contact: hima.tamas@gmail.com, www.project-ictdrv.eu

Indicator 1: A supporting and regulating legal and organisational framework

Legal regulations as well as the organisation of work provide the necessary framework for the implementation and, if applicable, recognition of CBT and SBT. This applies especially to the legal framework provided in the context of EC directive 2003/59 and, if necessary, further legal regulations having influence on the implementation of such training alongside regular work as a professional driver. Besides legal aspects also the work organisation provides the learner with the necessary time and framework to participate in CBT/SBT and with the necessary support to transfer newly gained abilities into practical work.

In terms of CBT/STB, it is one single law rule – namely the Ministry Ordinance No. 24/2005. (IV. 12.) GKM [this acronym for the Ministry for Economy and Transport] (hereafter referred to as the GKM Ordinance) – to determine training and testing requirements for road vehicle drivers and also for the Initial Qualification and Periodic Training for Driving Professionals (hereafter: CPC Qualification).

On the basis of the EU Directive and the Hungarian Ordinance in compliance with the Directive, drivers have to have an Initial Qualification and undergo a Periodic Training, either working for hire and/or reward or transports of own account, driving vehicles on public roads

- a) that require D/L of Category C1, C1E, C, CE, D1, D1E, D, DE or equivalent to them
 - aa) being an EEA citizen or
 - ab) non EEA citizen, however, employed by a company seated in Hungary
- b) being an EEA or non-EEA citizen, however whose usual place of residence is in Hungary on compliance with Art. 14 of the 3821/85/EEC issued 20 December 1985 not having a D/L of Categories C1, C1E, C, CE, D1, D1E, D, DE wanting to acquire a professional Initial Qualification (of CPC).

On the basis of this legislation, all drivers having acquired their D/L

- a) **after 9th September 2008** for the Categories **D1, D1E, D, DE** and
- b) **after 9th September 2009** for the Categories **C1, C1E, C, CE**

must undergo an Initial Driver Qualification Training.

After this Initial Qualification Training, if driver wants to remain within this profession, has to undergo a Periodic Training

- a) within 5 years after acquiring the Initial Qualification or
- b) if driver is not subject to the Initial Qualification,
 - ba) driving vehicles of Categories D1, D1E, D, DE, latest until the 10th September 2013 and

bb) driving vehicles of Categories C1, C1E, C, CE, latest until the 10th September 2014.

Periodic Training is valid for a period of 5 years. On wanting to remain within profession, driver has to repeat this periodic training every 5 years.

According to the present legislation, CPC qualification is allowed to be acquired both by traditional classroom training and also by e-learning (CBT: Computer Based Training). In case of a CBT Training, this type of training requires accreditation from the State (Authority). In both training forms, there are mandatory simulator training (SBT) courses to be completed for both Initial Qualification and Periodic Training.

It is always by the decision of the employer whether their drivers complete mandatory CPC courses during normal working time or after hours. GKM Ordinance does not determine about this, it only determines that subject is not allowed to work as a vehicle driver without this kind of (CPC) qualification. Beyond that, Employer is also not obliged to support this type of training in any other means (either by payment or organising courses and/or to give any kind of supplementary training). Despite of this fact, mainly with larger companies with larger vehicle fleet, there are some practices or initiatives to give some kind of support for their employees.

Scenario

Regarding the daily operation of the transport companies, the traditional forms of training are hardly matching companies' needs or possibilities, to arrange that their drivers always come back to their home country for any kind of mandatory training, either during working hours or afterwards, however, always outside of their normal working (= driving) hours. In opposite to that, CBT learning is not linked either to time period or place, therefore driver can go through the training material according to his needs/possibilities. Only necessary thing is internet access possibility. With regards to all these facts, CBT popularity is growing in Hungary versus the traditional forms of (classroom) training. It is no question today whether CBT/SBT is accepted in Hungary or not. It is, however, highly recommended to discuss, to which extent should be defined parameters of SBT on an EU level, which requirements should be maintained for using simulators (low end, high end etc.). CPC Qualification issued in each EU MS must be reciprocally accepted, however, they can make sure a high level of qualification if high level of technical and didactical requirements are mutually maintained.

Indicator 2: **Comprehensive information and counselling**

There are information and counselling measures put in place in order to:

- *inform end-users and decision-makers objectively about CBT and SBT,*
- *enable learners, employers and competent-bodies to decide if a CBT/SBT offer meets their requirements,*
- *enable learners and employers to decide if a the training format CBT/SBT is suitable for an individual learner and/or for a certain learning need,*
- *select and adapt courses to individual training needs of a learner and/or a company and*
- *provide learners and contact persons in their company with the necessary guidance and facilitation before, during and after the course attendance/ implementation.*

All companies employing drivers are profit-oriented, even those operating “not for profit”, because they also have to produce at least as much profit as to maintain themselves and employees (except those receiving funds from state support). It is an economic fact that profit depends of the effectiveness of the activity at a high rate. Training forms of CBT/SBT – also regarding what we have

written under Point 1 – influence the effectiveness of the transport companies in a less negative way, therefore they are capable to convince both end users (the drivers) and the decision makers (the companies) as they are, to satisfy their special needs. Most attention need not be devoted to convince them but much rather to make these methods (CBT/SBT) be more effective for their needs. Although the starting kit of the CBT for CPC training in Hungary was developed at a high level right at the beginning, developers are devoting many efforts to improve its professional, pedagogical, IT and didactical segments. The same would be expected toward SBT methods, however, there are some financial obstacles still there in Hungary waiting for a quick solution.

Scenario

Stakeholders in CBT/SBT processes (Authorities, drivers, transport companies) will jointly support these forms of training when their impact will be recognizable in the value system of each stakeholder. Authorities are now only interested in financial incomes of authorizing (accrediting) training companies and collecting fees due to examination, although there could emanate major incomes through transportation safety and diminishing insurance costs. Drivers are only interested in being allowed to remain within profession and not primarily in getting more professional training, although their salaries could take into account their professionalism through practice and quality training. Similarly, transportation companies only seem to accept mandatory re-training as a mandatory measure by authorities, although they could get more quality contract jobs through employing more professional drivers. It is at any rate desirable that stakeholders not only see mandatory training as a task which completion simply has to be ticked out, but they should find the CBT/SBT values in their real quality indicators.

Indicator 3: **Specifically trained trainers and tutors**

Trainers/ tutors facilitating technology-based training are – besides regular training for trainers and in professional topics – trained in a number of additional abilities that are based on the characteristics of the technology they are working with in its learning context. This includes among others specialised training:

- *for simulator trainers in the characteristics of learning with the simulator/ simulation, individual and group coaching and debriefing, the design and selection of scenarios and the operation and application of the simulator, its various features and additional tools and*
- *for e-learning tutors in the characteristics of distance learning, e-tutoring, learner motivation and instruction, e-communication and coaching as well as interviewing and feedback techniques.*

In terms of CBT/SBT, Hungarian legislation stresses importance of the possibility of individual learning, that means that the officially accredited training material and training management systems must make a fully self-dependent learning possible in a controlled and monitored way. It is nevertheless possible (but not mandatory), that training centers, in support of individual learning, all the same offer some personal consultation hours for their candidates to better be able to use CBT methods and, even more and more companies do that for their employees.

It is also recommended to analyze whether the number of “traditional” classroom tutors would diminish parallel to spreading CBT method. While there was a need of a traditional classroom tutor only one tutor per training course, CBT learning needs one contact person for each single candidate during a CBT course being capable to give necessary support for the candidates. It cannot be predicted, however, what amount of demand of those contact persons would emanate in the future and, one contact person only can serve a limited number of candidates. It also may happen that

more contact persons would be needed in the future than earlier in case of the traditional classroom training and this fact might contribute to the growth of employment of theory tutors.

It also contributes to the spreading of CBT methods that driving instructors in Hungary have to undergo a periodic training each year and, waste majority of the instructors are completing their mandatory retraining courses also via CBT and those retraining materials also contain a lot of knowledge related to CBT methods, in terms of their didactics, IT and procedural relevance).

What regards instructors conducting SBT lessons, we must state that there are no standard institutional methods to provide accredited training for this type of instructors. By some kind of minor exaggeration, SBT instructors are rather working on the basis of unwritten laws. This can be recognized at the level of education on one hand and, at the value of acquired (or non-acquired) skills, while on the other hand also at the level of reliability of candidates' knowledge/skills. It will be also necessary to re-negotiate quality and suitability of the accredited simulator devices.

Scenario

Equally proportional to the development of the CBT/SBT programs, maybe even more dynamic developing the fact that instructors providing CBT services need further development not to have difficulties with interpreting the training but also to cope with up-to-date IT equipment and the same applies for the SBT instructors as well. It is also important that instructors should be capable to adequately motivate candidates and to maintain their interest during the whole course. Primary goal is to reach instructors' adequate level of competence, to maintain and to continuously develop it.

Indicator 4: **Application of the learning outcomes approach**

The learning outcomes approach with its implications on the quality of training is applied on SBT and CBT. SBT and CBT courses are described in terms of learning outcomes (knowledge, skills and competences) associated with a course, learning environments are adequate to achieve those learning outcomes and, if applicable, assessment takes all kinds of learning outcomes into account and applies appropriate assessment measures.

Furthermore the application of the learning outcomes approach allows the recognition of prior/ non- and informal learning and the recognition of learning outcomes acquired within those CBT/SBT courses in the framework of other (formal) learning outcomes based vocational education and training courses/ certificates.

On the basis of the Directive 2003/59/EC, both initial and periodic training and testing had been made mandatory in Hungary. We know that it is not everywhere in the Member States, however, it is far from being unique with our domestic expectations of other fields of professionalism. It would contribute to the quality level of examination if CPC theory tests should be done via computers like basic theory tests for the acquisition of driving licenses. Today's CPC theory tests are done by multiple choice test papers, including a lot of ethic and also "fair-play" and other failures, also because those test sheets and correct answer solutions are going through the hands of rather many people and there are very many people who know test question solutions, therefore there is often a skepticism about the real value of the acquired knowledge/skills. Also this value is questioned regarding the mechanic memorizing the questions together with their correct answers, the high frequency of repeated schematic test questions which system should be thoroughly improved. At the same time it is rather positive that training material used within the frame of a CBT include module closing tests at the end of each module and also at the end of the final course, which definitely help assessing acquired knowledge of the candidates and, they can step forward to a subsequent training

module only after completing each CBT module and successfully completing their module closing tests.

One of the key elements of the SBT is that the evaluation of the skills acquired by using the simulator (should they be driving technique shortcomings of the candidates, response delay, hazard perception deficit or similar) should give really positive hints which can be used by the candidates in real traffic. SBT training applied in Hungary does not yet fulfill all these requirements as it should and does not yet give as much useful information as it would be expected to, but only states candidates' performance whether it can be accepted or not (e.g. to pass a test). The solution seems to be rather simple: to apply adequate system requirements for SBT training. It would only lead to a rather positive outcome if there would be harmonized quality criteria for that type of a training within the whole EU which would make those Member States to seriously improve their systems instead of merely "ticking out" the training as a mandatory element.

Scenario

Measuring the effectiveness of the training course also should be important. Today in Hungary, the regime is too mild with allowing 25% failed answers to the test questions in each Subject as per the Directive. There are 3 mandatory test subjects with 40 test questions each (thus the duration of the written theory test is 120 minutes as per the Directive) and, each candidate is allowed to give 10 wrong answers per subject. If the number of wrong answers does not exceed that amount, the test should not be repeated. We would recommend to only allow 5 wrong answers per test subject (sheet) to make candidates to better prepare for correct answers and to make learning process more intensive.

Indicator 5: Provision of an added value to the learning process

The application of computer- and simulator-based training has a clear added value for the learning process and/or the achievement of the aspired learning outcomes. Technology-based courses are therefore exclusively offered for the achievement of learning outcomes that can clearly benefit from the application of such learning approaches and/or that can be equally be achieved through classical as well as through technology-based training approaches.

CBT training has been allowed in Hungary since 2012, which can be seen also as the recognition of the added value to the learning process. There was, of course, a strong resistance also in Hungary against this type of training. However, on the basis of the expectations of the accreditation process our experts managed to create such kind of parameters which may guarantee the quality of the training material, to enforce candidates' proceeding on the basis of the growth of their knowledge and also that, if it is not the candidate himself going through the CBT training material (e.g. he asks or pays for others to do that instead of him), his theory test exam conducted by the Authority would most probably fail. This is a method of regulation which highly supports public understanding and recognition. The success of this concept is also proven by the pass rate of the theory tests candidates: it can be measured today mainly with the theory tests results for the acquisition of the D/L, because of the now very large number of the examinees Having chosen CBT as their training method.

Scenario

We have spoken about the evaluation system in Hungary in the section Scenario under Quality Indicator 4. We may add some supplement here that we jointly should unify theory test requirements for CBT/SBT within the EU in order that a D/L or CPC License (Driver Qualification Card) really should mean knowledge and skills of the same quality level not depending in which MS it had been issued.

Indicator 6: **Sound and thorough instructional and technological interface design**

The design of CBT and SBT is based on instructional design considerations taking into account the aspired learning outcomes and the needs and characteristics of the learner. This leads to the development of learning environments providing best conditions to stimulate and facilitate learning. Pedagogy drives the choice of instructional technology, not the other way around.

Planning CBT/SBT training is linked to an accreditation which is based upon a thorough professional preparation process. During these preparation works in Hungary, accreditation highly respected all professional (trade), pedagogical, didactical, information technological and other technical parameters which enable in Hungary learning process based upon knowledge. But besides all of that, we continuously have to strive to a continuous development and improvement, to incorporate new research outcomes into the training material and to the most effective delivery of the knowledge material. It is also guaranteed by the law that the accreditation of the training management system has to be renewed within the time period written by law. The same applies for the accreditation of the driving simulators for SBT courses which will make sure that all equipment going to be out of date by that time will be withdrawn from the SBT system and replaced by more up-to-date ones.

Scenario

Structural design of training/retraining material, their appearance and technology will follow expectations of future ages. This way seems to be appropriate at the moment, however, we always have to remember continuous overview and improvement.

Indicator 7: **Continuous evaluation and further development of CBT/SBT courses**

CBT/SBT courses are continuous subject for review, change, improvement and further development in order to adapt to changing needs and requirements and to the state-of-the-art of educational technology. Learning is the leading factor within all evaluation and development efforts.

CBT/SBT courses introduced in Hungary are all multi-level courses. That means that candidate can step forward within the training material only after giving proof of their knowledge/skills acquired on the previous level. It is one of the guarantees making sure that CBT/SBT system is capable for delivering expected professional knowledge and skills. As an outcome of this, trade stakeholders tend to better recognize these new systems with each expected parameter of those completely matches their expectations.

Scenario

Justification of CBT/SBT programs cannot be question-marked for they have proven their capabilities in other areas of social life (college/university training, special trade vocational training) and also

within the field of road transport (driver training). Their development is continuous because changes in our World only can be followed this way.

Indicator 8: Research, sharing and networking on the realisation of SBT and CBT

The implementation of SBT and CBT requires a continuous dialogue and close cooperation between education providers, developers of CBT and simulators as well as researchers, therefore, continuous sharing, networking and joined research activities are taking place in order to further work on the improvement of SBT and CBT.

System development has been stressed several times within this paper. There are many indicators relating to development, one of most importance might be the feedback received from the users. Acquisition of a feedback also may happen spontaneously (receiving the feedback launches development process), but also may be more effective if developer does not wait for spontaneous feedbacks but is systematically collecting them from the customers. Those giving spontaneously feedback usually do it when experience some negative characters and also only they see it to be of major importance. However, to ensure a continuous and systematic development of the system, developer has to regularly collect feedback and about each important part of their system, and draw appropriate conclusions. Each feedback has to be evaluated in details to make sure the most appropriate training material develops. Collecting feedback is a different discipline, has to be striving to get the essence and, adequate techniques and technologies have to be deployed lest the interviewed customer should not feel time wasted for giving answers to questions he may see inadequate.

Within the field of CBT/SBT applications it is clearly seen that the developer devotes a lot to measure customers' satisfaction, due to the strong competition within the market and, all those information will then be "fed back" to continuously improve their systems.

Scenario

In each society, the involvement of the State always gives some kind of confidential fill. That means if State embraces methods of CBT/SBT – what is happening now in Hungary --, this process can be inserted into other societal processes as well. Thus a more open and wide control, a more effective development and also more idea for improvement might be present when further designing the system, which definitely lead to raising the quality and capability indicators of the system.