



Task QP-19: Setting up and support for a European Database of multiple-choice-questions for the management level

Recommendations of CESNI/QP experts

Extract from document CESNI/QP (22) 29

1. **Keep the scope of the database small in the first stage** (= consisting only of questions and answers for the boatmaster certificate of qualification) and **build an easy-to-implement database**, filled with exam questions that may come from participating Member States or other verified sources (e.g. consultants),

The main reasons are the preference as expressed by stakeholders for quick tangible results for the database as such, and importance of autonomy for member states when it concerns test assembly and test administration.

An option would be already to have at an early stage a methodology for selecting and attributing value to a question and, where possible, to generate examinations automatically.

At a later stage the scope could be enlarged with questions and answers concerning specific authorisations.

At the end, the scope could comprise a workflow (to generate examinations automatically) and an evaluation system. For all questions, reference should be made to the regulations with the aim to keep the questions up to date.

2. **Ensure that the database enables import, export and publication of items,**

These functions will do for the first phase.

In the initial phase, the database should already contain basic functions, such as select and sort, which are needed for efficient retrieval of questions.

3. **Collect, maintain and provide the items in one language only, and, for mainly practical reasons, it is suggested that this language should be English,**

It could be an option to keep the original language version of an item for documentation. The item should be phrased in an unambiguous manner to avoid misunderstandings on the interpretation. The group of volunteers could generally continue to work in English. Experts will need revision skills for linguistic terminology.

Other recommendation in this sense: Use **multiple choice questions only in the short term**, but keep options open for other item types in the long term,

This appears to be acceptable to stakeholders and reduces costs and complexity in the short run.

Additional aspects on the software, cloud solutions, authentication procedure and storing user data:

- Conduct a brief study for the selection of the software;

Consult member states who have experience with this. Make a decision after comparing the pros and cons of available options.

- Decide whether data may or may not be stored in the cloud,
- Choose for a solid and reliable authentication procedure for all users, after comparing the pros and cons of each option,
- Where user data is concerned, use procedures for data registration which are compliant with data protection rules within CESNI Member States, in order to comply with laws on storing personal data,

Make sure that each member can benefit from the new database,

It should not be a step back for any of the Member States.

The common interest is to have a harmonised set of questions and answers for examinations within the CESNI Member States.

4. Make CESNI responsible for the content, the operation and the maintenance of the database,

This option has ample support from the Member States; any other option is not logical. CESNI could delegate parts of the operational work to a team that is hosted by another organisation. It has been suggested that CCNR should be the only other organisation which parts of the operational work could be delegated to.

This recommendation has several aspects:

- a) **Formulate quality standards and procedural conditions for member states** to contribute items to the new international database,
- b) Create **review and approval procedures**,
- c) Formulate **conditions** for member states **for exporting items** from the item bank.
- d) **Contract a** (small dedicated) **project team** responsible for developing procedures and guidelines. This project team should report to the steering committee (assigned by CESNI).

5. Investigate options for funding to make a detailed project planning with external help and take approximately 2-3 years for full implementation,

Based on best practice with projects of similar scale, this is the time according to Cito's report commonly needed to build an operational item bank.

Before contracting someone, the criteria for the full database need to be defined as well as a starting and ending point of the project.

6. Consider involving **external support (also ADN experts) during start-up of the item bank**, if CESNI requires some guidance in the next steps towards building a question database,
7. **Formally invite CBR and up to three other 'frontrunner' organizations** (e.g. input from the COMPETING project) to share (A) part of their item bank, and (B) their know-how, procedures and manuals on the authoring and item banking process.

A group of four frontrunner organizations may be considered a sufficiently large 'critical mass'. This group of organizations/ Member States could be in the lead of the project.

The project will then have a solid foundation to build upon and to grow. Other Member States should be kept informed about the project to allow them to join it at any stage.
