

# NÚCEM

NÁRODNÝ ÚSTAV CERTIFIKOVANÝCH  
MERANÍ VZDELÁVANIA



## **Electronic School Leaving Exams in Slovakia Project Maturita Exam On-line**

**International Congress ITAPA 2010**

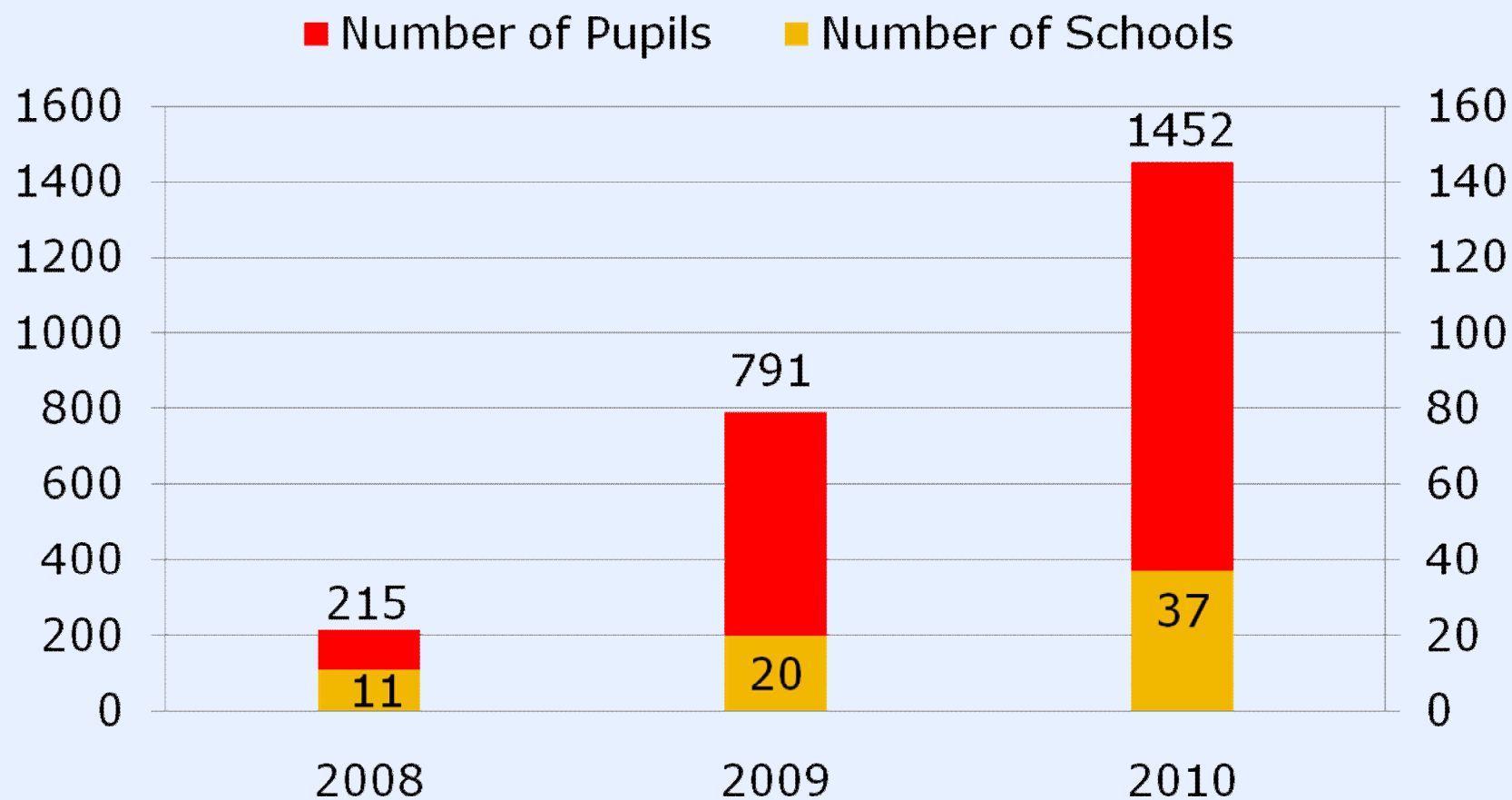
**Bratislava, 9th – 10th November 2010**

# Maturita Exam On-line Project Purpose

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- Expanding the use of IKT in the field of external evaluation at the national level to improve the educational process
- Making the transformation from a traditional school to a modern one
- Follow-up to global experience and development in the EU countries in the improvement of education and use of new methods and technologies
- Implementation of an electronic testing as an alternative to a paper form or its replacement in the next period

# Development of schools and pupils involved in Maturita Exam Online



# Implementation Team and Project Management

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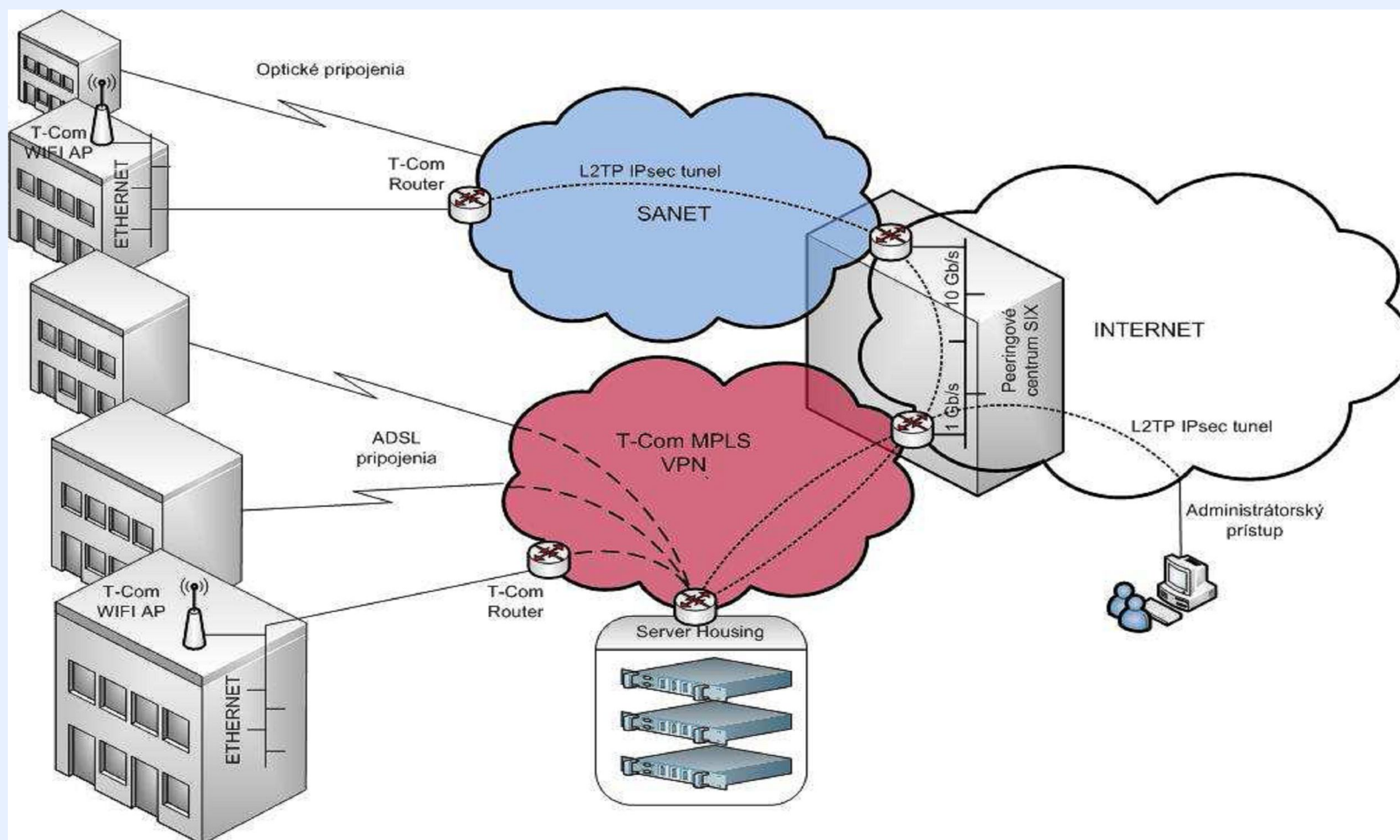
- ❑ Ministry of Education, Science, Research and Sport of the Slovak Republic
- ❑ National Institute for Certified Educational Measurements
- ❑ Institute of Information and Prognoses of Education - School Computer Centers
- ❑ Data Centre of Ministry of Education, Science, Research and Sport of the Slovak Republic
- ❑ Technical Solutions Supplier

# Project Purpose of Maturita Exam On-line

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- To verify the possibility of introducing electronic testing in Slovakia from different aspects: technological, security, personal, pedagogical
- To prepare and create the infrastructure of electronic testing and the technical solution, including school equipment
- To increase security distribution of school leaving exams' questions
- To have more effects in logistics processes of school leaving examinations
- To increase the speed and objectivity of external evaluation of school leaving exams' tests

# Diagram of a Network Connection at Schools into On-line Environment



# The Test Environment for Pupils and Teachers

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- Web Portal [www.maturita-online.sk](http://www.maturita-online.sk)
- Web Test Application:
  - [English](#)
  - [Mathematics](#)

# Evaluation of Questionnaires for School Leaving Exam Takers, Coordinators and Administrators – 2010

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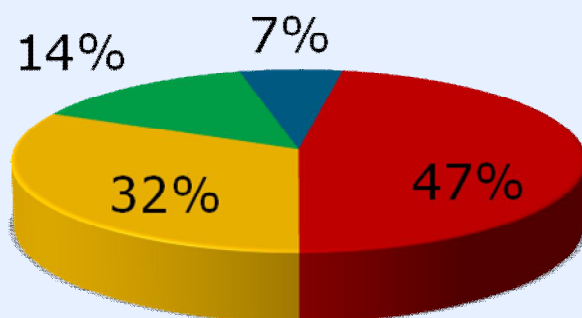
- Anonymous answers, we know only the corresponding school, voluntary participation
- The electronic questionnaire was completed:
  - by 87 % of pupils solving test AJ B1
  - by 92 % of pupils solving test MAT
  - by 76 % of coordinators and by 81 % of administrators
- 2 schools did not respond to questionnaires



# Results of the Questionnaires – Pupils

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How were you selected for maturita exam online?



- I signed up voluntarily
- Pupils were selected by coordinator
- It was done the random selection or lottery
- Another way

## Results of the Questionnaires – Pupils

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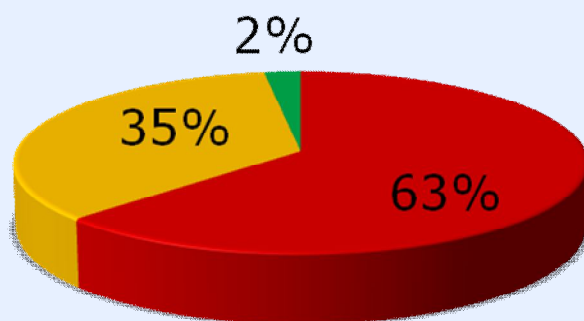
How do you evaluate the clarity, content and technical design of web portal for matura exam online?



## Results of the Questionnaires – Pupils

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How do you evaluate the technical and graphics processing of on-line test in English language?



■ Very good without shortage

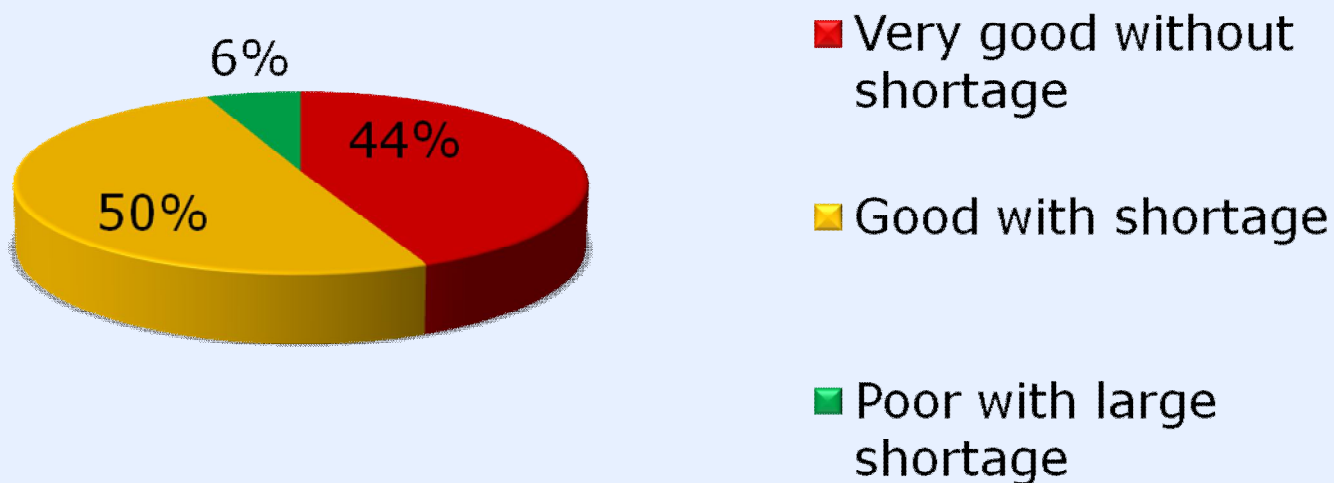
■ Good with shortage

■ Poor with large shortage

## Results of the Questionnaires – Pupils

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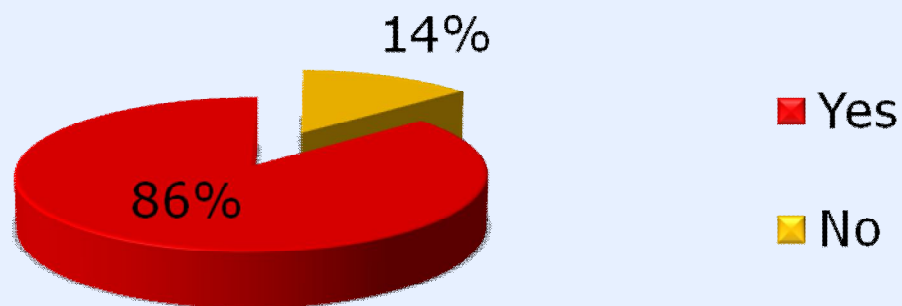
How do you evaluate the technical and graphics processing of on-line test in Mathematics?



## Results of the Questionnaires – Pupils

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Would you recommend, based on your personal experience, matura exam on-line to your classmates?



# Results of the Questionnaires – Coordinators and Administrators

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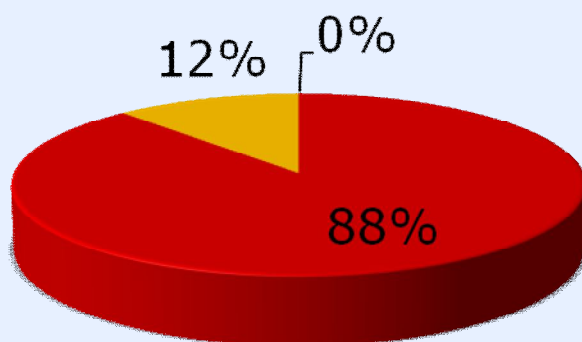
How do you evaluate an organizational security of maturita exam online and a quality of initial training?



# Results of the Questionnaires – Coordinators and Administrators

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How do you evaluate know-how, organizational complexity of the instructions and the quality of the information portal for maturita exam on-line?



■ Very good without shortage

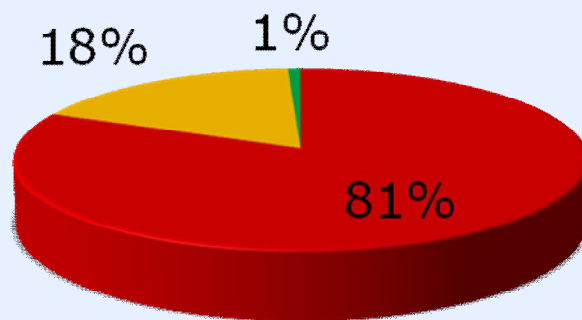
■ Good with shortage

■ Poor with large shortage

# Results of the Questionnaires – Coordinators and Administrators

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How do you evaluate technical support of matura exam on-line?



■ Very good without shortage

■ Good with shortage

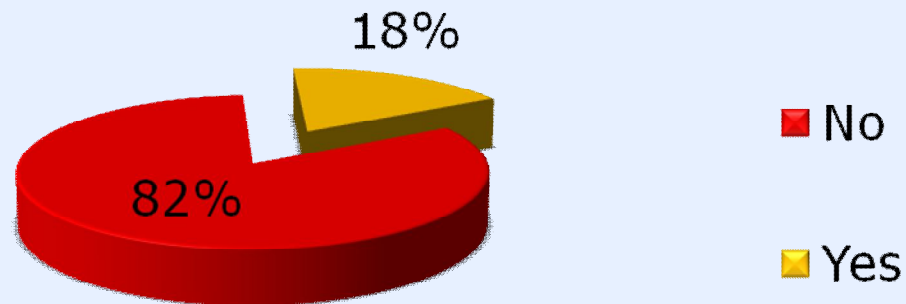
■ Poor with large shortage



# Results of the Questionnaires – Coordinators and Administrators

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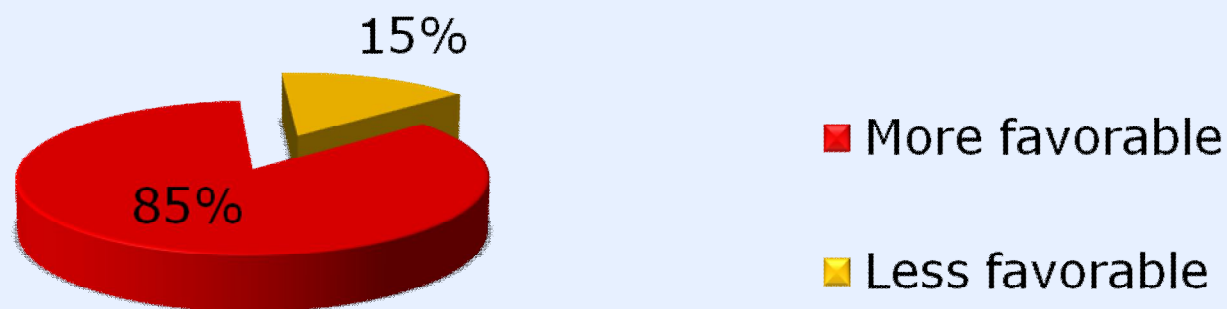
Were there any technical problems during online testing?



# Results of the Questionnaires – Coordinators and Administrators

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What is the perspective of introducing matura exam? Is it more or less favorable in comparison with a paper form of school leaving exam?



# Strengths of the Project

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- ❑ Speed, efficiency and objectivity of the evaluation of pupil responses
- ❑ Lower intensity of logistics practices in the preparation of school leaving exam (printing, packaging of tests, courier ...)
- ❑ Electronic version of the tests - solving tasks directly in the test, prompt navigation between the unanswered questions
- ❑ Positive acceptance of online testing by students and schools
- ❑ Well managed way of organizational, technical support and project information

# Weaknesses of the Project

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- Personal and financial intensity of security data transfer solutions and overall implementation
- Need of homogenization of HW and SW equipment at schools
- Poorly secured network connections in some schools
- Need of manual training schools – personal and time-consuming procedure
- Absence of uniform methodology of project management
- Need of combination of electronic and paper tests

# Prospects of Electronic Testing

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- ❑ Building more advanced testing certification centres (TCC) at schools
- ❑ Use of TCC for continuous testing at schools throughout the school year
- ❑ Construction of the central bank tasks
- ❑ Opening of new options when assigning tasks - multimedia environment, texts, internet resources, space modeling
- ❑ Creation of effective tools to improve the quality of the teaching process, education for teachers and evaluation of schools

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Thank you for your attention!

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