

**Republic of North Macedonia
State Examinations Centre**

THE CONCEPT OF NATIONAL ASSESSMENT FOR PRIMARY EDUCATION



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**NATIONAL
ASSESSMENT**

1 INTRODUCTION

Improving the quality and efficiency of education, in accordance with modern world educational standards, are key goals of educational policy in the Republic of North Macedonia (RNM). In order to achieve these goals, especially in primary education, the Government of RNM, through the Ministry of Education and Science (MES), should develop and implement a comprehensive National Assessment (literal translation - *State Testing*) that will systematically monitor student achievement and hence, educational achievements in general. Such a state testing will provide an assessment of the effectiveness of the current education system and the basis for its further qualitative improvement.

This document sets out the *Concept* that will support the National Assessment (NA). It outlines the objectives of the National Assessment, the guiding principles by which it will work and the general methods to be used in conducting studies that are part of NA.

The *Concept* was developed by an expert Working group formed by the director of the State Examinations Centre (SEC). The full details of the technical discussions that resulted from the decisions regarding the National Assessment moved in this *Concept* are given in the additional "Position Paper on National Assessment", which takes into account the best international practices and the prevailing context in RNM.

National assessment is an important segment of the strategic development plans for education in RNM that should contribute to their successful implementation. Therefore, the National Assessment (State Testing) is integrated in the Law on Primary Education, which expresses the serious intention of the Government of RNM for its consistent implementation. The Law on Primary Education² sets the legal framework for the introduction of National Assessment and delegates the responsibility for its design and implementation.

In addition, the National Assessment is based on numerous strategic documents made in recent years, including:

¹ The "Position Paper on National Assessment" was developed in 2020 by the Working Group for the development of the *Concept of National Assessment*. The Working Group, formed by the director of the State Examinations Centre, includes members from the State Examinations Centre, the Ministry of Education and Science, the Bureau for Development of Education and practitioners from primary education.

² The Law on Primary Education, Official Gazette of RNM, No. 161 of 05.08.2019.

- Education Strategy for 2018-2025;
- The Concept of Nine-year Primary Education and Upbringing;
- The National Program for Development of Education in the Republic of Macedonia 2005-2015.

This significant reform in primary education in RNM is in line with the recommendations of the OECD set out in the document "OECD Reviews and Evaluation in Education: North Macedonia"³ and will be implemented within the "Primary Education Improvement Project", proposed by the Government of RNM and supported by the World Bank.

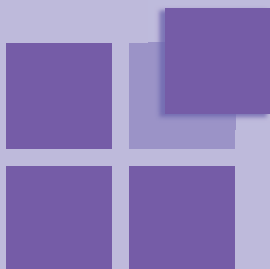
³ OECD (2019), *OECD Reviews of Evaluation and Assessment in Education: North Macedonia*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <https://doi.org/10.1787/079fe34c-en>.

2 EXPLANATION OF TERMS

Throughout this document, the technical terms listed below are used with the meanings specified.

- **Assessment (Educational Assessment):** A general term applied to all activities carried out in an educational setting to ascertain the learning status of one or more students for any purpose. Hence, the term covers everything from the informal assessment of learners in the classroom by teachers for diagnostic purposes through to highly formal examinations such as Matura used for selection in a competitive environment.
- **Examinations:** Formal assessments of student achievement typically conducted under strictly controlled conditions and used to certify student achievement and/or to select students for further educational opportunities e.g. Matura examinations in RNM.
- **Large-Scale Assessment:** An assessment exercise in which very large numbers of students participate or are represented. The term generally applies to International Assessments and National Assessments.
- **International Assessment:** A large-scale assessment exercise in which a number of countries participate. One purpose of such studies is to provide data which can be used to make international comparisons as to the achievements of students. Examples include TIMSS, PIRLS and PISA⁴.
- **National Assessment:** A comprehensive series of National Assessment studies to be conducted over the long-term. The National Assessment specifies the nature and frequency of the studies to be conducted over time for all target cohorts (grades) and all target learning domains (subjects).
- **National Assessment (Study):** One specific study conducted as part of the overall National Assessment e.g. *'National Assessment of Grade 5 students' achievement in Mathematics and Language conducted in 2024'*.

⁴ Trends in Mathematics and Science Study (TIMSS); Progress in International Reading Literacy Study in Primary (PIRLS), Programme for International Student Assessment (PISA).



3 RATIONALE

It is universally acknowledged that assessment is a critical element in the process of education. Assessment traditionally measures and records the achievement of individual students but it can also provide information which may be used in reforming policies and practices so that the effectiveness and efficiency of the education system are improved. The World Bank's 'Systems Approach for Better Education Results' (SABER) framework⁵ identifies four categories of assessment, all of which are found in high quality education systems. These are:

■ Classroom Assessments:

Assessments conducted by teachers for diagnostic purposes and for monitoring and recording student achievement.

⁵ For more information on SABER visit <http://saber.worldbank.org/>.

■ Examinations:

Formal assessments typically carried out under controlled conditions to certify student achievement and/or to select students for further educational opportunities.

■ Large-scale International Assessments:

Assessments organised by international agencies which systematically measure the achievement of students in participating countries enabling international comparisons to be made.

■ Large-scale National Assessments:

Assessments designed and conducted by a country to systematically measure the achievement of its students enabling evaluation at the system level and providing information which can be used to shape educational policies and practices.

The first three of these forms of assessment are already firmly embedded in the education system of RNM.

1. All teachers regularly assess the progress of their students through formal and informal methods and report their findings to parents and others through a familiar and trusted system of reporting.
2. Students reaching the end of their secondary education take Matura examinations, the results of which are

used to certify their achievements and in the selection process for institutions of higher education. Matura examinations, conducted by the State Examinations Centre (SEC), provide reliable results which are widely trusted by society.

3. RNM has for many years participated in all the major international studies of learner achievement: TIMSS from 1999; PIRLS from 2001; and PISA from 2000.

The only form of assessment which has not yet become a regular and permanent feature of our education system is large-scale national assessment. This *Concept* is an expression of the commitment of the Government of RSM and the Ministry of Education and Science to rectifying this.

The *Concept* set out in this document describes a large-scale national assessment which is fully compatible with the Government's strategy and is regulated by the Law on Primary Education.

4

GENERAL CHARACTERISTICS OF LARGE-SCALE ASSESSMENTS

Large-scale assessments – national and international – have specific characteristics which distinguish them from traditional examination systems. Perhaps the most fundamental of these is that whilst examinations focus on the achievements of individual students, large-scale assessments are primarily concerned with gathering information about typical achievement at the system level, i.e. for all students taken together and for well-defined sub-groups only. In order to achieve this, large-scale assessments have the general characteristics described below.

- They are based on predetermined research questions. These may include, for example, questions such as: “Do boys and girls achievement similar outcomes?” “Do students from urban areas have similar outcomes to those from rural areas?” “Do students taught by newly qualified teachers have similar outcomes to those taught by more experienced teachers?”

etc. *The agreed research questions determine the data to be collected and how it will be analyzed, presented and used.*

- They collect data on background factors presumed to influence learner achievement. Contextual data is collected through questionnaires which are completed during the period when students are tested. *The research questions determine the background data to be collected from students, teachers, school principals, etc.*
- They collect data on learner achievement through testing. The testing process for large-scale assessments may look like the conduct of an examination but there may be important differences. For example, students in the same classroom may be given different test booklets to complete. This is to ensure that sufficient data is collected on all the learning outcomes included in the design of the assessment framework.
- They can achieve their objectives by testing a representative sample of students rather than the whole cohort. The achievement levels of students in the sample can then be generalised for the whole population. *Sample-based assessments offer a more efficient way of collecting data than assessments where all students are tested.*
- They use sophisticated technical procedures to ensure that data collected is comprehensive, reliable, valid, and sufficiently precise. For example, sophisticated test scoring procedures are used to link student results

from different test booklets and to standardise measurements over time. Similarly, sophisticated statistical techniques are used to generate accurate national achievement levels from the results achieved by the students in a particular sample.

- They use a range of methods to convey key findings to key stakeholders so that they can act to improve outcomes. *The primary aim of a large-scale assessment is to generate reliable data and information which can be used to improve future learning outcomes.* This typically involves the production of multiple reports, each targeted at a key audience such as policy makers or practitioners (teachers, school principals, etc.).

5

NATIONAL ASSESSMENT VERSUS INTERNATIONAL STUDIES

International and National Assessments share many of the same characteristics and the National Assessment described in this *Concept* paper will incorporate best practices from the major international studies. However, there is a fundamental difference which is of critical importance. In order to allow for valid comparisons between countries, all countries participating in international studies agree to follow the same procedures, use the same questionnaires and tests (with a few minor exceptions), and have their results presented on common reporting scales. All these aspects are set by the international organising agency responsible.

National Assessments do not have this restriction and so they can be designed to fit closely national priorities and national contexts. For example, the assessment frameworks and tests for the National Assessment for Primary Education in RNM will be rooted in the curricula of the MES.

In addition, and most importantly, the levels of achievement used for reporting will reflect both the learning objectives contained within national curricula and the reality of the situation in the nation's classrooms.

Another advantage of National Assessments over International Studies is that they are more flexible. Because they are under the control of the MES they can be easily adjusted to meet changing needs. For example, an additional subject can be added, temporarily or more permanently, to the National Assessment if the MES decides that it has become an important domain which deserves investigation.

To summarise, international and national assessments share many technical characteristics but they serve slightly different functions. Therefore, the National Assessment conceptualized here will complement the international studies in which RNM participates especially those conducted in the primary phase of education – PIRLS and TIMSS. When taken together with PIRLS and TIMSS findings the new National Assessment will give a very detailed picture of student achievement in our primary schools.

The image features a light purple background with two overlapping squares. The front square is a darker purple and contains the text 'NATIONAL ASSESSMENT' in white, bold, uppercase letters. The back square is a lighter shade of purple and is partially obscured by the front one.

**NATIONAL
ASSESSMENT**

6 PURPOSES

The main goal of the National Assessment (using standardized procedures and instruments) is to provide reliable and objectively verifiable data on the standards of achievement of students in learning domains considered to be of special importance during primary education. This data will provide evidence for developing and advancing educational policies in RNM in order to achieve modern world educational standards.

The data obtained from the National Assessment will be used as:

- *Indicators of the knowledge and abilities of the students* from the grade and subject teaching in selected subjects and teaching areas at the state level. The data will be used to evaluate the achievement of students against the expected outcomes set out in the relevant curriculum and to create future expectations regarding student achievement.
- *An empirical basis for improving the quality of education*, given that student achievement is the most important indicator of the quality of education. Es-

timates of the current situation, measures for improving the quality of education and changes in education policies are significantly better if they are based on reliable data.

- *Insights into the background factors (within the school, the family and the local community)* that affect student achievement. Data collected through the questionnaires used in National Assessment highlights the most significant factors impacting on student performance allowing educational policy makers to make better decisions related to improving school conditions and improving the quality of teaching.
- *Indicators of the needs of the teachers in enhancing their professional development and effectiveness.* This will be achieved by linking the views and experiences of teachers with measurements of student achievement.

It is important to emphasize that a National Assessment cannot address all elements of the complex teach-

ing/learning process nor can it shape all aspects of quality assurance in primary education. However, properly administered national assessment can provide reliable quantitative evidence which can contribute to raising the quality of education and improving student achievement at the state, district and school levels.

Finally, data obtained through the National Assessment as conceptualized here will be aggregated at the system level. Data from the assessment cannot and will not be used by any authority to monitor the performance of individual students, to evaluate the performance of individual teachers or to make comparisons between the achievements of individual schools.

7

KEY DESIGN PARAMETERS

7.1. TARGET POPULATION

Initially, the target population for the National Assessment will be all regular students from public primary schools where the language of instruction is either Macedonian or Albanian. This population will yield sufficient information for the stated purposes.

In the future, when resources allow, it may be desirable to add students who currently form small sub-groups (<5%) in the system, e.g. those taught in other minority languages (Turkish, Serbian or Bosnian) and those attending private elementary schools.

7.2. TARGET COHORTS

Initially, the National Assessment will target two important points in the primary phase of education: students nearing the end of Grade 3 and students nearing the end of Grade 5. When National assessment for these cohorts is well-established and when resources allow, a third target cohort will

be added to complete the system: students nearing the end of Grade 9.

Grade 3 is chosen because it marks the end of the first cycle of primary education in RNM. It also represents the earliest point at which young learners can be assessed using standard, objective instruments.

Grade 5 is chosen because it marks the end of 'classroom education' and is the point at which learners enter a different mode of education, i.e. subject teaching.

Grade 9 is chosen because it marks the end of nine-year primary education, the point at which students transition to secondary education. Measuring the achievement of students at this point provides objective indicators as to the effectiveness of education in our primary schools.

7.3. SAMPLE

National assessment will not test all students in the target cohort. It will be conducted using representative samples. This approach, which is used in all international studies, allows sufficiently precise measurement of student achievement whilst using minimum resources. The size of the sample depends on the degree of precision required in the values to be reported. In RNM, it is estimated that a suitably representative sample can be achieved by conducting the assessment in approximately 100 public primary schools (i.e. about 30% of public primary schools are likely to be involved in the main data collection for each National Assessment).

Samples will be drawn using standard statistical methods based on probabilistic (random) selection of schools. This will allow results to be generalised to the level of the state and the administrative divisions with an acceptable degree of precision.

7.4. LEARNING DOMAINS

It is universally accepted that language literacy and mathematical literacy are the most important learning domains as they represent the key enabling skills necessary for life-long learning. This is especially true in the early years of education. This is reflected in the fact that all international studies and the national assessments of other countries include Language and Mathematics as core subjects to be assessed. The National Assessment in RNM will follow this practice: Language and Mathematics will be tested in all three target grades: Grade 3, Grade 5 and Grade 9.

The assessment frameworks used in developing national assessment tests for Language and Mathematics in RNM will be based on MES approved curricula for the relevant grades. Emphasis will be placed on measuring achievement against the most important learning objectives of the curricula.

After the stabilization of the National Assessment in terms of measuring language and mathematical literacy, in accordance with the needs of educational policy and available resources, testing of students' achievements in the third

subject (domain) will be introduced, in one or more target classes. The decision on the selection of the third subject is made by the Minister of Education and Science, at the proposal of the educational institutions involved in the design and implementation of the National Assessment.

The third subject (domain) may be:

- a subject taught in all target classes (eg. English);
- teaching domains that are taught continuously and are distributed in different subjects (eg. domains represented in the subjects of natural sciences / biology or in society / history / civic education, etc.);
- interdisciplinary tests in areas such as natural sciences or social sciences.

The third subject can be included in the regular National Assessment or only in one cycle, as a separate research topic. This possibility shows the flexibility of the National Assessment as conceptualized here.

Primary school education in RNM is realised in five languages of instruction: Macedonian, Albanian, Turkish, Serbian and Bosnian. By far the greatest majority (>95%) of students in primary education attend classes in Macedonian and Albanian. Therefore, the National Assessment will, at least initially, provide tests in the two majority languages. According to internationally accepted standards for the conduct of large-scale assessments, excluding very small language groups

will not significantly damage the measurements made to ascertain national achievement levels.

If, in the future, additional data is required on the achievements of students who attend classes in Turkish, Serbian or Bosnian, they can be included with the approval of the Minister of Education and Science.

7.5. FREQUENCY OF ASSESSMENT

The process of National Assessment for each grade takes three years to complete:

- the first year includes survey design and pre-testing of instruments;
- main data collection (testing) takes place in the second year;
- reporting and dissemination takes place in the year following the main data collection.

However, the processes for different target grades can overlap with one or more rounds of National Assessment. As a result of the overlap, despite the fact that it takes three years to complete the process, in practice the main testing is organized every second year. This frequency of National Assessment leads to increased efficiency and allows regular flow of information to the MES and school practitioners.

The proposed schedule for National Assessment testing (data collection) in schools is shown in the table below. For further details about each stage of state assessment, see the Annex to this document.

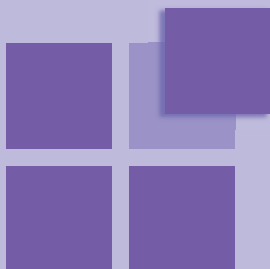
Grade	Year of main testing						
	2022	2024	2026	2028	2030	2032	2034
Grade 3	✓		✓		✓		✓
Grade 5		✓		✓		✓	
Grade 9				✓		✓	

7.6. METHODS FOR REPORTING ACHIEVEMENT

Following international best practice, the National Assessment will use two methods for reporting student outcomes: standardised scores and achievement by level.

SEC will use sophisticated statistical techniques to place student responses on a standardized, numerical reporting scale similar to that used in international studies such as TIMSS and PISA. These numerical scores will allow for further in-depth analysis of student performance and, because the scale is fixed, will allow comparisons to be made over time giving an indicator of progress.

Student achievement will also be reported against an agreed framework of 'levels of achievement'. This will, for example, provide information as to the proportion of students reaching the basic (minimum acceptable) level of achievement. The levels of achievement will be defined using the judgement of subject specialists in conjunction with numerical information gathered in the testing process.



8

MODE OF CONDUCT

8.1. GENERAL ADMINISTRATION

National assessment will be conducted in the public primary schools selected. All administrative procedures for conducting the assessments – including the application of tests and questionnaires - will be defined and documented by the SEC. Within each participating school, organization of the testing and completion of questionnaires will be the responsibility of a team comprising the school Principal, teachers, and school support staff. All those involved will be trained in the required procedures by SEC Advisors.

8.2. TEST BOOKLETS

As described in Section 7.4 above, national assessment test booklets will be developed according to detailed assessment frameworks derived from national curricula. The tests will set out tasks that measure student achievement against key learning objectives. In or-

der to ensure that results are reliable, each selected area will be covered by an appropriate number of tasks (~15) and responses to each task will be collected from at least 250 students. In order to achieve this, the test for each subject will have a complex design. That is, multiple test booklets ('variants') will be prepared so that maximum information can be gathered whilst minimizing the testing load on each student.

The duration of each test and the number and format of tasks presented will be set taking into account the likely level of development and maturity of the students. This is particularly important for the Grade 3 assessments where tests will take into account the limited reading and writing skills of young learners.

Test booklets for older cohorts will contain tasks set in a variety of formats including:

- Multiple-choice (student chooses the correct answer from several offered alternatives)
- Short-answer (student writes an answer comprising a word, a number or a sentence)
- Open-ended (student writes a longer answer, solves the task with a complete procedure or produces an extended solution to a complex task)

Initially, all national assessment tests will be of the pencil-paper type, i.e. students will receive printed tests and will write their answers on the test booklet or on special answer sheets. This is in line with current practices in schools and with the hardware/software currently avail-

able to them. It also recognizes the fact that younger students are likely to have limited familiarity with IT solutions. In the future, when conditions allow, tests are likely to be administered electronically. This will increase the efficiency of the assessment process and will also reduce costs. In recognition of this future development, the SEC will develop and pilot some electronic testing and administration procedures in parallel with the implementation of the National Assessment as described herein.

8.3. QUESTIONNAIRES

Data on background factors thought to impact directly or indirectly on student achievement will be collected through several types of questionnaires: for the students, for teachers whose students are tested, and for Principals of the selected school. If it is not possible to gather the relevant data through these questionnaires it may be desirable to ask parents of tested students to complete a special questionnaire.

- **Student questionnaires** provide information on their attitudes towards the learning of the subjects being tested, assessment of their learning abilities, extracurricular activities, learning support from family members, home learning conditions, age and gender of students, parents' education, etc. In administering questionnaires to young learners – especially those in Grades 3 and 5 – teachers will be encouraged to explain the questions so that students can respond.

- **Teacher questionnaires** provide personal data (age and gender of teachers, their work experience, etc.), data on their attitudes about the curricula covered by the National Assessment, the manner of assessment, the way of working and working conditions, the motivation to work, professional development and so on.

- **School Principal questionnaires** provide data on the size of the school and its organization, the conditions and resources in the school, the organization of teaching and the work of the Principal, and an evaluation of the school 'climate'.

Initially all questionnaires will be administered on paper with a view to moving to electronic systems when conditions allow. SEC will provide guidance on administering the questionnaires. This guidance will include information about the intended use of personal data and its protection.

8.4. CODING STUDENT RESPONSES

Unlike examinations, national assessments collect data not only on the number of correct answers but also about the incorrect responses given by students. This data gives valuable diagnostic information for teachers and other practitioners. For this reason, SEC will develop guidelines for evaluating each task and recording student responses.

For each multiple-choice task, the student's response – right or wrong – is entered in the

database. Special codes are also used to indicate a ‘skipped’ question or where the answer is unclear.

However, coding student responses to open-ended questions will require a more complicated coding system. Assessment guidelines for open-ended tasks are developed by the respective subject working group. The guidelines contain detailed instructions for evaluating each task as objectively as possible. Assessment guidelines contain all possible correct answers to the short answer and open-ended tasks. They also identify typical wrong answers based on common misconceptions. Collecting data on the categories of correct and incorrect answers yields potentially valuable information.

SEC will be responsible for appointing suitably qualified assessors, for training them, and for monitoring the quality of their work.

8.5. DATA ENTRY, PROCESSING AND ANALYSIS

SEC will be responsible for setting up and maintaining the databases necessary for storing, processing and analyzing data from each National Assessment study. SEC will train assessors and other operatives to code information from student test booklets and from all questionnaires. The resulting data will be entered into prepared databases according to agreed technical guidelines. Where possible, automatic recognition of student responses to multiple-choice questions will be used. The resulting datasets

will be cleaned by SEC to ensure that non-valid data and conflicting values are removed.

Once the datasets are complete, trained SEC specialists will process the data using appropriate software for organizing and analyzing data. Much of the preliminary analysis will be carried out using a standard analytical package (e.g. SPSS or STATA). Further analysis of student responses to test items and the calculation of standardized scores will require the use of more specialized psychometric software. Analysis using Classical Test Theory will generate important evidence as to the technical quality of test items and give a preliminary indication of typical student achievement. Ultimately, analysis using Item Response Theory will be used to generate stable, standardized ability estimates (scores) for each student. From these, SEC will generalize results to the national level as required by the purposes of the National Assessment. Strengthening SEC’s capacity to carry out the necessary psychometric analysis, including the application of IRT, will be an immediate priority. Specialized software will be procured and two or more members of staff will be trained in its use in applying IRT.

Following analysis, preliminary quantitative results will be summarized in tables, diagrams, and charts. SEC will follow international standards in presenting such data. In particular, all key statistical indicators will be presented with relevant standard errors or confidence intervals to allow meaningful comparisons to be made.

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**NATIONAL
ASSESSMENT**

9

REPORTING AND DISSEMINATION

In order to maximize the positive public impact of the National Assessment in public, a comprehensive reporting and dissemination campaign will be put in place for each cycle of National Assessment. This will cover all key stakeholders: educational policymakers, the community of educational professionals, and the general public. The main aim will be to provide information to be used for improving the general quality of education and, in particular, raising the achievement of future students.

In order to meet the needs of different key audiences, reporting will involve a range of activities including: published a range of targeted reports; professional and public meetings and debates; assessment-related training programmes; and, the sharing of resources derived from National Assessment studies.

9.1. REPORTS

In preparing reports on the outcomes of National Assessment for

key audiences, special emphasis will be placed on their form to enable them to access the results in a language appropriate to the target group and to contain elements that will allow the target group to act upon the findings. Upon completion of each major assessment, the following will be prepared:

- a detailed report to the expert community on student achievement;
- a summary report of key findings ('headlines') for the general public;
- supplementary reports on specific aspects for teachers and/or educational policymakers;
- posters and brochures on the main findings as part of a Public Relations campaign;
- electronic reports for the schools included in the sample to assist in self evaluation.

The general public will be regularly and timely informed about the objectives of National Assessment and all-important stages of implementation, through traditional and new media, to create a positive attitude towards testing and to avoid speculation and misinterpretation.

9.2. DEBATES

Public debates with individuals and institutions whose interests are in education (domestic and foreign experts, practitioners, NGO representatives, representatives of international organizations and institutions, student associ-

ations, etc.) will provide insights into the pros and cons of the National Assessment process and the results. The views and suggestions presented at the stands will be used to improve the concept of National Assessment, to improve procedures, and to take measures within the teaching process to improve performance.

9.3. TRAINING

The training associated with conducting national assessment and correctly interpreting and applying the results will take place in several stages with an ever-increasing number of participants.

- Training, conducted by SEC, of all primary school teachers, regardless of whether their schools are included in the testing sample or not, in order to acquaint them with: the objectives of measuring student achievement at the state level; the type of tasks used in testing, the process of creating and using standardized tasks to improve the teaching-learning process in classrooms.
- Training, conducted by SEC, of the working groups for preparation of the tasks for pre-testing prior to use in the National Assessment. Also training for those involved in scoring/coding student responses to open-ended tasks.
- Training for SEC staff and others by recognised experts on the primary and secondary analysis of data from National Assessment

and their interpretation. Also, specialist training for SEC staff by foreign experts on the use of Item Response Theory (IRT) so that results in RNM can be reported on technically valid standardized scales.

9.4. ELECTRONIC ACCESS TO RESULTS

SEC will establish and maintain a web portal to allow members of the public, educational practitioners and MES specialists to relevant National Assessment reports and other related resources.

- The general public will have access to all reports produced by the SEC on state-level testing results and findings.
- Professionals in the field of education, including research students and specialists employed by scientific institutions and/or non-governmental organizations, will be able to apply to SEC for access to anonymous data from National Assessment studies for further in-depth analysis. Regulations and guidelines for the protection and use of such data will be drawn up by the SEC in collaboration with the MES.
- School Principals will have access to the results of their own students – but not to those of any other school – to enable them to evaluate their own results and plan internal activities to improve student achievement.

9.5. PROFESSIONAL MATERIALS FOR TEACHERS

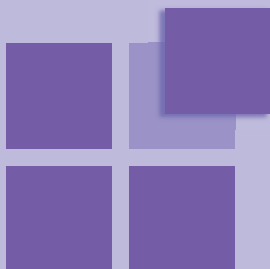
The SEC will publish collections of selected tasks ('released items') from past National Assessment studies together with assessment guidelines and information about typical performance of students. Teachers will be able to use these in their regular instruction. They will also help indirectly in improving the skills of teachers in preparing high quality test items.

Subject to approval by the MES, SEC advisors and other support staff (e.g. BDE advisors and teachers) will develop teacher handbooks to improve different aspects of teaching based on findings from National Assessment studies.

9.6. ELECTRONIC "ITEM BANK"

Once the National Assessment is well established, SEC will create an electronic 'bank' of assessment tasks for use by primary education teachers. This will include tasks that have been created by practising teachers who have been trained to prepare items by SEC. This 'item bank' will serve as a tool for teachers to collaborate and assist in the creation of quality standardized tests and / or combine standardized items to be used in their classrooms. For teachers in primary schools, the bank will be free to use.

Whilst participation in the enrichment of the item bank will be voluntary, teachers may choose to use this opportunity – together with the training provided by SEC – as part of their continuous professional development.



10 INSTITUTIONAL RESPONSIBILITIES

10.1. MINISTRY OF EDUCATION AND SCIENCE

The MES is ultimately responsible for the quality of education in schools. Therefore, it has a responsibility to provide the conditions for conducting the National Assessment, which will serve as an important ‘tool’ providing information about the effectiveness of primary education in RNM. This is recognised in the Law on Primary Education which stipulates that the Minister of Education and Science adopts the *Concept of National Assessment* on the proposal of the State Examination Center.

Once the National Assessment is fully functioning, the MES will have responsibility for reviewing its benefits and shaping its future development.

10.2. STATE EXAMINATION CENTRE

The State Examination Centre is an independent institution responsible for organising, conducting and supporting external assessments and checking students' achievements in primary and secondary education in RNM. It has the necessary capacity and experience to organise examinations, international studies, and sample-based national assessments. Accordingly, the Law on Primary Education stipulates that the SEC will be the lead institution for implementing the National Assessment and analyzing the results thereof.

The SEC will prepare and document formal Procedures detailing all phases of National Assessment and the responsibilities of those involved in order to ensure the quality and timely realisation of the National Assessment. The Procedures will be derived from the *Concept* as approved by the Minister of Education and Science.

The preparation of tests and questionnaires will be coordinated by SEC but will involve co-opted professionals including SEC advisors, teachers-practitioners and university professors.

The SEC will be responsible for preparing reports on National Assessment outcomes for key stakeholder groups.

10.3. PUBLIC PRIMARY SCHOOLS

The cooperation of the Principals and teachers of public primary schools will be an essential element in conducting National Assessment Studies.

SEC will appoint a number of teachers currently serving in primary schools to participate in the development of the national assessment frameworks and the preparation of test booklets. This will ensure that national tests are appropriate for the target cohort and that they reflect good teaching practice.

In selected schools Principals, and their support teams, will be responsible for the conduct of the data collection process. In particular, school teams will ensure that tests and questionnaires are administered according to the agreed procedural guidelines.

All public primary schools - regardless of whether or not they are included in the national test sample – will be responsible for evaluating their own teaching/learning practices in the light of key findings from the National Assessment and, where appropriate, making changes to improve the achievement of their own students.

11 TIMESCALE FOR IMPLEMENTATION

This *Concept* ultimately envisages the establishment of a sustainable, rolling National Assessment studies measuring and monitoring the achievement of students in primary schools at the key stages of Grade 3, Grade 5 and Grade 9. Developing and implementing the National Assessment in full will be technically challenging, will require the dedication of adequate resources and, in particular, will take time.

A phased approach, starting with the youngest of learners (Grade 3), will produce results three years after inception. Two years later, results for the next age cohort (Grade 5) will be available. Therefore, five years after inception the National Assessment will have provided the MES and other stakeholders with accurate baseline data for the two youngest target groups.

In the seventh year after inception, a second set of results will be available for the Grade 3 cohort.

This will not only update the picture on student achievement but will also provide, for the first time, a reliable indicator of progress within the primary education system.

In the ninth year after inception, a second set of results – including progress indicators – will be available for Grade 5. In addition, the first National Assessment of students in their final year of primary education will be concluded.

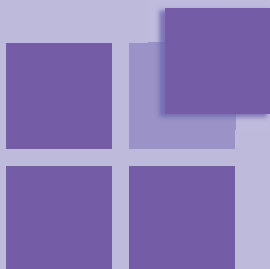
The proposed timetable set out above is undoubtedly ambitious but is considered achievable. It assumes that the National Assessment for each grade takes three years to complete but that the cycles can overlap partially without overwhelming the resources of the SEC and without placing an unreasonable burden on schools.

The image features a light purple background with two overlapping squares. The front square is a darker purple and contains the text 'NATIONAL ASSESSMENT' in white, bold, uppercase letters. The back square is a lighter shade of purple and is partially obscured by the front one.

**NATIONAL
ASSESSMENT**

12 CONCLUSIONS

- The National Assessment conceptualized here will provide the MES and other stakeholders with a reliable ‘snapshot’ of student achievement across the vitally important primary phase of education.
- Analysis of the factors which impact on learning outcomes will provide educational policy makers and practitioners with objective evidence as to what works well in primary schools and what doesn’t. Such evidence has the potential to identify effective policies and improve teaching/learning practices.
- Over time, the National Assessment will generate reliable indicators of progress which can be used to evaluate systematically the effectiveness of the system and any strategic interventions.
- The National Assessment will provide data relevant to the prevailing context in the primary schools of RNM. This will complement data collected through the country’s participation in international studies of student performance.
- Implementing this National Assessment will complete the nation’s educational assessment framework ensuring that all four elements recommended for effective system management are in place: Classroom Assessments; Examinations; International Assessments and National Assessments.



ANNEX

SCHEDULE FOR IMPLEMENTING A NATIONAL ASSESSMENT FOR PRIMARY EDUCATION

Year of realization	Calendar year	Grade (Generation of students)	Types of testing	Types of reports
1	2021	III (G1)	Pre-testing	Internal reports**
2	2022	III (G2)	Main testing	
3	2023	V (G1)	Pre-testing	Main Report (III - G2)* Internal reports**
4	2024	V (G2)	Main testing	
5	2025	III (G5)	Pre-testing	Main Report (V - G2)* Internal reports**
6	2026	III (G6)	Main testing	Comparative reports:*** - G2 (in V and III grade)
7	2027	V (G5) IX (G1)	Pre-testing Pre-testing	Main Report (III - G6)* Internal reports**
8	2028	V (G6) IX (G2)	Main testing Main testing	Comparative reports:*** - III grade (G6 with G2)
9	2029	III (G9)	Pre-testing	Main Report (V - G6)* Main Report (IX - G2)* Internal reports**
10	2030	III (G10)	Main testing	Comparative reports:*** - V grade (G6 with G2) - G2 (in IX, V and III grade) - G6 (in V and III grade)
11	2031	V (G9) IX (G5)	Pre-testing Pre-testing	Main Report (III - G10)* Internal reports**
12	2032	V (G10) IX (G6)	Main testing Main testing	Comparative reports:*** - III grade (G10 with G6 with G2)
13	2033	III (G13)	Pre-testing	Main Report (V - G10)* Main Report (IX - G6)* Internal reports**
14	2034	III (G14)	Main testing	Comparative reports:*** - V grade (G10 with G6 with G2) - IX grade (G6 with G2) - G6 (in IX, V and III grade) - G10 (in V and III grade)
15	2035	V (G13) IX (G9)	Pre-testing Pre-testing	Main Report (III - G14)* Internal reports**

NOTES ON THE SCHEDULE:

1. Types of testing:

- The achievements of the students from III, V and IX grade are tested with three-year cycles (pre-testing, main testing and report) that start every fourth year. Due to the overlap of different cycles, the testing (pre-testing or main testing) is organized every year.
- The achievements of students from V and IX grade, starting with the cycle in 2027, are tested in the same year.

2. Types of reports:

- * The main report is always prepared in the first year after the main test (the third year of the three-year cycle)
- ** Internal reports are prepared immediately after each pre-testing i.e. by the end of the first year of the three-year cycle. Types of internal reports:
 - Technical report for conducting testing and verification of procedures (for the needs of SEC).
 - Report on the quality of the tasks (for the needs of the subject working groups).
- *** The comparative reports are prepared in the second year after the main testing, i.e. after the end of the three-year cycle. Types of comparative reports:
 - Comparative reports on the achievements of *students from different generations in the same grade* (e.g., comparison of achievements in *III grade* of the tested students from the second generation - G₂ with the achievements of the students from the sixth generation - G₆ and with the achievements of the students from the tenth generation - G₁₀).
 - Comparative reports on the achievements of *the same generation of students in different grades* (e.g., achievements of the second generation of students - G₂, tested in III, V and IX grade).

3. Subjects:

The Table does not specify subjects because detailed information is provided in the main document. But it is important to emphasize that:

- Every year the achievements of the students in Language (in Macedonian language of instruction and in Albanian language of instruction) and in Mathematics (in Macedonian language of instruction and in Albanian language of instruction) are tested.
- The testing of the achievements in Language in the fifth grade, for the students who are taught in Turkish, in Serbian or in Bosnian language of instruction, will be implemented in those years when a special decision will be made by the Minister of Education and Science.
- The third subject and the year when the testing is conducted for it are determined by a special decision of the Minister of Education and Science. The third subject may be different in each test and / or interdisciplinary.

The given time frame covers 15 calendar years. The first four calendar years of National Assessment are considered a period for stabilizing the procedures for organizing the testing and creating quality exam materials.



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