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## **Report of the Chairman of the 2014 European Baccalaureate Examining Board**

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BOARD OF GOVERNORS

Meeting on 2, 3 and 4 December 2014 – OSGES (Brussels)

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**REPORT OF THE CHAIRMAN OF THE 2014 EUROPEAN BACCALAUREATE EXAMINING BOARD**

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## **Introduction**

It was a great pleasure to work as Chairman of the European Bacculaureate during the Bulgarian Presidency of the European Schools in 2013-2014. Holding the office gave me an opportunity not only to go into the preparation and the conduct of the 2014 examinations by the European Bacculaureate Examining Board, but also to observe the work of the Board of Inspectors (Secondary), the Joint Teaching Committee, several schools, officials, teachers and students.

When I started my term of office in October 2013, I was not familiar with the European School System and the organisation of the European Bacculaureate. I thus learned a great deal, thanks to the help provided by many people. They included: Mr Kivinen – the Secretary-General, and his Deputy, Mr Marcheggiano; Ms Gardeli – the Head of the Bacculaureate Unit for the 2013-2014 session; Ms Sofronieva – Chair of the Board of Inspectors (Secondary) during the 2013-2014 school year and my partner in chairing the European Bacculaureate. The directors of the European Schools that I visited, their deputies and educational advisers were also a mine of information. Needless to say, I studied the documentation concerning not only the European Bacculaureate, but also some other aspects of the European School System, as well as the Reports of some of the previous Chairmen of the European Bacculaureate Examining Board.

In this report I am not presenting statistical data about the 2014 Bacculaureate, as I do not think that that is its purpose. There are other reports which aim to provide statistical data and analysis. I see the Chairman's report as a document describing his work and observation of the main Bac activities, some impressions, points of view and recommendations. That is what follows below.

## **Visits and Meetings**

During the 2013-2014 school year, my partner in this mission, Ms Sofronieva, and I tried to visit as many European Schools as possible. Because Bulgaria is relatively far from the majority of the European Schools, travel expenses are high. In order to match the limited funds available, we visited fewer schools than the Chairman of the 2013 European Bacculaureate, for example. Nevertheless, I hope the information that we obtained is sufficiently rich and adequate for the purposes of this report.

In addition to participation in some of the meetings of the Board of Inspectors (Secondary) and the Joint Teaching Committee, Ms Sofronieva and I visited several schools for the Pre-Bac (part examinations) in January and some other schools during the June-July Bac session. We observed and took part in the correction of the written examinations, we observed the conduct of oral examinations and we visited three schools for the Proclamation Ceremony.

The following table summarises those activities.

<b>Date</b>	<b>Place</b>	<b>Activity</b>
08-10 October 2013	Brussels, ES Central Office	Attendance at the meetings of the Board of Inspectors (Secondary) and the Joint Teaching Committee.
November 2013	My home	Examination of the documentation concerning the European Baccalaureate and other aspects of the ES system.
20 January 2014	ES, Brussels III	Monitoring of the Pre-Bac examinations.
21 January 2014	ES, Brussels I	Monitoring of the Pre-Bac examinations.
22 January 2014	ES, Brussels II	Monitoring of the Pre-Bac examinations.
23 January 2014	ES, Luxembourg II	Monitoring of the Pre-Bac examinations.
24 January 2014	ES, Luxembourg I	Monitoring of the Pre-Bac examinations.
February 2014	My home	Examination of some papers from the Pre-Bac examinations.
3 June 2014	Accredited School Parma	Monitoring of the Bac examinations.
4 June 2014	ES, Varese	Monitoring of the Bac examinations.
10, 11 June	ES, Munich	Monitoring of the Bac examinations.
16 June	Brussels, ES Central Office	Attendance at the meetings of the Board of Inspectors (Secondary).
17, 18 June 2014	ES, Brussels I	Monitoring of correction of the exam papers.
2 July 2014	Accredited School Strasbourg	Monitoring of the Bac oral examinations.
3 July 2014	ES, Luxembourg I	Monitoring of the Bac oral examinations.
4 July 2014	ES, Brussels I	Proclamation ceremony.
5 July 2014	ES, Luxembourg I ES, Luxembourg II	Proclamation ceremonies.
July 2014	My home	Writing of the report.

## **Pre-Bac**

The Pre-Bac visits showed that the examinations went quite smoothly. The invigilators observed the rules of procedure. Students worked quietly. Being a mathematician, I examined some mathematics papers and found that they were professionally set.

Having said that the Pre-Bac examinations seemed perfectly well organised at school level, I would nevertheless draw attention to their harmonisation at system level. In the past school year each school was responsible for setting the Pre-Bac examination papers for its students. Even though the teachers who prepare the examination papers consider the requirements of the final Bac, differences between the schools in the Pre-Bac examinations could be large. Since the Pre-Bac marks form part of the final marks in the Certificate, some consideration should be given to minimising these differences. The best decision is for the Pre-Bac examination papers to be prepared at the Central Office, as is the case with the Bac papers (see recommendation 1 below).

Thanks go to the colleagues in the five schools that we visited for the Pre-Bac for making the visits informative and pleasant.

## Bac – Written Examinations

The written examinations were well organised. The documents describing the examination procedures are clear and they make matters workable for the school Baccalaureate teams. My impression is that the people conducting the examinations know what to do and how to do so.

There were very few mistakes in the examination papers. Bearing in mind the large number of examination papers prepared in so many different languages, the mistakes are insignificant in quantity. It is certainly true that the aim must always be to achieve the goal of zero mistakes.

The situation with candidates' absences and other irregularities was quite similar. In practical terms, it is impossible to avoid such events. There is a separate report with the numbers of such occurrences. The important thing is that these numbers in the 2014 session fall within the normal range. I am pleased to report that all these events were resolved logically, using the Bac regulations and common sense criteria.

Organisation of the Bac examinations proceeded so smoothly because there is a document (Arrangements for implementing the Regulations for the European Baccalaureate (Applicable for the year 2014 Baccalaureate session)) which precisely describes the procedural steps in the Baccalaureate. On the other hand, there is no document precisely describing the content and the cognitive aspects of the examinations (the so-called specifications of the examinations). The lack of such specifications is one reason why it is not easy to judge whether different versions of the examination papers are 'equivalent'. It is even more difficult to judge *a priori* whether the examination papers set for one and the same subject in two different Bac sessions are 'equivalent'. (The examination papers can be equated using contemporary methods of analysis of examination results (*a posteriori* judgement) – see recommendation 7 below.)

Discussing the possibility of *a priori* judgement of the difficulty of the Bac examinations, I should mention that in conversations with directors, educational advisers, teachers and markers during my visits, I heard concerns about the difficulty of some examinations, especially in mathematics and the (natural) sciences.

For mathematics, in particular, I heard the view that 'university mathematics' topics probably feature too much in the curriculum and in the Bac examination papers respectively. In any case, the universities do not relay such knowledge and students study these topics again (certainly at a higher level and with greater precision) during their first year at university. People said that these topics are slightly 'over the top', especially for students who will not have careers requiring mathematics. Instead, some more 'practical mathematics' could be included in the curriculum and in the Bac examination papers respectively.

There is a need to be very cautious when analysing these opinions. On the one hand, they could be based on objective views, i.e. the influence of PISA and the ongoing discussions about the transition from knowledge-based to practically-oriented mathematics teaching. On the other hand, they could be much more subjective, for many reasons, i.e. teachers are not very well prepared to teach these topics, some psychological aspects may influence these opinions (these topics are not in the curriculum of some of the EU countries), etc.

From my one-year term of office I was not able to learn enough to judge which of the above reasons predominate in these opinions. For that reason I am not going to make any recommendations in that respect.

Along the same lines, I think that a few words about the Bac 2014 chemistry written examination should be included in the report. That was the issue which required the most communication time and consideration during the 2014 Bac session. The problem started with a letter signed by about 30 chemistry teachers and coordinators from the European Schools. They expressed concerns that the 2014 Bac chemistry examination paper contained “questions that are outside of the syllabus, as well as questionable and repetitive calculations”. They also said that “the chemistry exam is wholly unsuitable due to its great difficulty and lack of clarity, not to mention the recurring errors in the solutions. Moreover, students did not have sufficient time to read the questions to make the correct question selections; to think carefully about their answers; and to check their answers at the end of the exam”. After investigation of the basic statistics on the chemistry (written examination) marks and conversations and meetings with markers and teachers, carried out by the Central Office, it became clear that there were signs that the chemistry examination was difficult and that some candidates had indeed experienced difficulties in answering the questions within the time allowed for the examination. Several options to minimise the impact on the candidates were considered. The final decision was to increase each candidate’s final score for the chemistry written examination by 0.5, leaving the maximum of 10 as the final mark. In addition, the Central Office offered all chemistry students the possibility of re-sitting the examination on 2 September 2014.

The above story with the chemistry written examinations made me think that more sophisticated procedures are needed for writing exam specifications (recommendation 2 below), guides for correction (recommendation 3 below) and conducting in-depth analysis of the Bac results (recommendation 7 below).

### **Bac – Oral Examinations**

The oral examinations, like the written ones, were very well organised. On the whole, the time allocated for candidates’ preparation and for the examination was strictly observed. In the schools that I visited the internal and external examiners worked well as a team.

Two points are worth mentioning:

(i) During the conversation with the examiners, I formed the impression that not all external examiners were fully conversant with the marking criteria.

(ii) There were different sets of examination topics for different language sections even in one and the same school. That seems to me to be wrong for oral examinations in some subjects (see my recommendation 6 below). I am mentioning this issue because it places the candidates in different conditions. For example, in the mathematics oral examination, in one school I saw a set of exam topics that contained theoretical questions, whilst in another school this set contained questions that required problem-solving skills. These are different mathematical activities. I certainly acknowledge that language oral examinations need to have different sets of topics for different languages and this also applies to some other subjects.

## Proclamation Ceremonies

This was the most emotional and exciting part of the work. Ms Sofronieva and I attended the ceremony in three schools, where I gave a short speech. Many thanks to the schools that invited me to that ceremony. These were unforgettable events. I really hope that the unique atmosphere of the proclamation ceremony will continue in the coming years.

## Recommendations

The recommendations below are based on my one-year observation of the European School System. The impression that I formed during my term of office is certainly not comprehensive and probably unbalanced to some extent. I believe that my duty is to give recommendations that are closely related not only to the Baccalaureate but also to the functioning of other aspects of the European School System.

Some of the recommendations will require more time (i.e. years) to be implemented. If accepted, these recommendations may become long-term goals to be achieved in the future.

**1. Pre-Bac examination papers to be prepared at the Central Office** as is the case with the Bac papers. This is an important step toward harmonisation of the Baccalaureate. Pre-Bac results are taken into account in the final marks in the Certificate. For that reason it is important for the Pre-Bac examination papers to be prepared in a uniform, standardised way.

**2. Clear specifications for the Bac (and Pre-Bac) examinations are needed for every subject.** The specifications should include the content and the cognitive aspects of the examinations. These documents will not only facilitate the development of the examination questions, but also will make possible judgement of the validity of the examination papers. I think that some of the problems in the chemistry written examination in the 2014 Bac session came about because of the lack of such specifications. These are problems such as: (i) the presence of a question in respect of which it is not clear whether or not it was included in the curriculum; (ii) the time allowed for solving/answering the questions; (iii) the expected level of difficulty of the examination, etc. These problems could be avoided (at least partially) if there were clear specifications for the chemistry examination and a check against them was made by experts. This certainly applies to the examinations in all other subjects.

**3. Detailed guides for correction of candidates' scripts are required.** The usual practice for the correction of candidates' papers for the Bac examinations is to give the markers guides that contain only the solutions and/or the right answers to the examination questions. It would be better to make these guides more detailed, considering different solutions and describing the award of different scores. The latter issue involves the following situation: how to award maximum or minimum scores is usually clear, but how to award scores for partially correct answers is less obvious. This is a critical issue in scripts with partially correct answers but not a complete solution. My observation showed that there was not usually a big difference in the scores awarded by the two markers. This is probably because the second markers are people who have previous experience as

teachers in the European School System. However, I think that an important step towards harmonisation of the examinations is to have a clear common marking and grading scheme for each subject.

**4. Involvement of university professors in some of the Bac activities.** I found a similar idea mooted by one of my predecessors, Professor Mats Ekholm, in his report on the 2009 Baccalaureate. He proposed including university professors as second markers in the correction of the written examinations. I did not note any progress in that respect. I think that the involvement of university professors is important, for the following two reasons at least: (i) Even though the European School System works quite well, it is pernicious for it to remain self-contained – communication with other education systems will keep the educational process fresh. (ii) The natural partners for fruitful communication are universities, since one of the goals of the European School System is to prepare students for university studies. University professors may be involved in the development of examination questions, the setting of examination papers and (as Professor Ekholm suggested) in the correction of candidates' scripts. Involvement in the latter activity requires detailed guides (see recommendation 3 above).

**5. Two oral examinations.** Article 6.6.1.1 of the Arrangements for implementing the Regulations for the European Baccalaureate (Applicable for the year 2014 Baccalaureate session) states that candidates should take three oral examinations. I tried to find out what the purpose/rationale of the oral examinations is. Since I could not find a written statement on the subject, I decided to rely on the common understanding of what oral examinations are for, namely so that students can express their knowledge orally. In school education this is most appropriate for the so-called 'narrative subjects'. Mathematics and the (natural) sciences do not belong in that category. This is the reason why I believe that oral examinations in mathematics and the (natural) sciences do not make much sense. On that basis, I propose that Article 6.6.1.1 (above) be amended so that candidates are expected to take two oral examinations, namely: (i) Language 1 or Advanced Language 1, and; (ii) Language 2 or Advanced Language 2, or History (2 or 4 periods), or Geography (2 or 4 periods).

**6. Steps toward harmonisation of oral examinations.** I was surprised to find that in some subjects oral examinations are conducted with a different set of examination topics for different language sections, even in one and the same school. I think that it would be far more uniform and easier for each school to prepare only one set of examination topics for all sections. The Central Office should definitely control this process strictly (through the respective inspectors). I certainly understand that for language examinations and for some other subjects it is important to have different sets of questions for different language sections – I am not including them in this recommendation.

**7. Maintaining a database and conducting in-depth analysis of the Bac results.** The Bac results provide a wealth of data. It is a pity not to use them for in-depth analysis of students' achievements in Bac examinations. My suggestion to the Baccalaureate Unit is to create a 'statistics' section that will maintain the Bac data over the years and will conduct in-depth analysis of students' results. The benefits are that it will be possible not only to compare the level of difficulty of the examinations year by year, but also to track the differences between successful candidates, etc. Using contemporary methods of analysis of examination results, it will also be possible to equate examination papers from different years based on the basic items.



**8. Participation in international educational studies.** I was informed that the ES, Luxembourg I took part in the PISA study as a school coming under the Luxembourg education system. During my term of office I learned that the European School System is a unique educational entity, not connected to any national education system. In the modern world it is not possible to have a separate existence without information about the System's place amongst other education systems. The most reliable information in that respect can be obtained through participation in international educational studies. This why I recommend that the European School System should take part in studies such as PISA, TIMSS, PIRLS, etc. There are many benefits to be gained from participation in international studies. They include the fact that these studies provide intermediate (not just at the end of the school year) and periodic diagnostics of the system.

## **Conclusion**

In every school visited the 2014 Baccalaureate session was conducted in accordance with the written procedures. During the examinations the staff ensured that the atmosphere stimulated the students and was conducive to demonstration of the best of their knowledge.

Based on the documents relating to the 2014 European Baccalaureate and on my observations of Bac activities, I can assert that the 2014 Baccalaureate session was well prepared, organised and conducted.

Thanks go to the European Baccalaureate Examining Board for their hard work!

## Annex

I am including here a summary of some suggestions that I heard during my conversations with teachers, directors, markers and other staff of the European Schools visited. These are not my own suggestions. I do not have the time or the opportunity to consider them. In my view they are not so important as to be included in the main part of the report, but could be taken on board for improvement of the system.

**1.** Article 6.4.2(b) of the Arrangements for implementing the Regulations for the European Baccalaureate (Applicable for the year 2014 Baccalaureate session) says that “In biology, history and geography (all with two periods a week), two short written examinations lasting one teaching period will be organised as part of the normal timetable in the course of each semester.” It is not clear when these examinations take place. Do they form part of the Pre-Bac (in that case they need to be scheduled in the Pre-Bac activities) or are they supposed to be planned by teachers as part of their classroom activities? Some clarification in that respect might be useful.

**2.** The preparation of CDs in music examinations takes time. An hour is not usually enough. The suggestion is that a clause might be inserted into the Bac Implementing Arrangements stating that the examination paper for music may be opened two hours before the exam’s start time.

**3.** In the final years there is a tendency to lessen the requirement for regular assessments during the school year. Students thus form the impression that they have adequate knowledge and have acquired good skills for the actual Bac examinations. Consequently, students have high expectations of their Bac results. On the other hand, the requirements of the Bac examinations remain the same and are usually very high. This leads to a gap between students’ expectations of their Bac results and the results actually achieved. This gap is sometimes quite dramatic. It is probably, therefore, not a good idea to lessen the requirement for regular assessments during the school year.

**4.** Accredited Schools usually receive documents to be proposed to the Joint Teaching Committee **before** its meetings, but do not always receive them **after** meetings when these documents have been approved. The approved documents may not be exactly the same as the proposed documents. The suggestion is that there should be written regulations for the process of sending the final versions of all documents to Accredited Schools.

## **OPINION OF THE JOINT TEACHING COMMITTEE**

The Joint Teaching Committee expressed a favourable opinion on the report and thanked Mr Bankov, Chairman of the 2014 European Baccalaureate Examining Board, for his work.

## **PROPOSAL**

The Budgetary Committee is requested to take note of the Report of the Chairman of the 2014 European Baccalaureate Examining Board.

## **OPINION OF THE BUDGETARY COMMITTEE**

The Budgetary Committee took note of the Baccalaureate Chairman report and thanked Mr Bankov, Chairman of the 2014 European Baccalaureate Examining Board, for his work.

## **PROPOSAL**

The Board of Governors is requested to take note of the Report of the Chairman of the 2014 European Baccalaureate Examining Board.