Schola europaea

Office of the Secretary-General

European Baccalaureate Unit

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BACKGROUND DOCUMENT ON THE MODERATION METHOD FOR THE EUROPEAN BACCALAUREATE MARKS IN 2020

EXTRAORDINARY BOARD OF INSPECTORS (SECONDARY)

Extraordinary Meeting on 29 May 2020 - Online

Preamble

During its meeting on 15-17 April 2020, the Board of Governors has cancelled the organisation of the European Baccalaureate 2020 examinations and decided to award the European Baccalaureate Diplomas using only A1, A2 and B1 marks (preliminary marks). Distribution of results might differ significantly from past years' final marks distributions. Regulations concerning the European Baccalaureate foresee the possibility to apply moderation, prerogative of the President and Vice-Presidents of the European Baccalaureate.

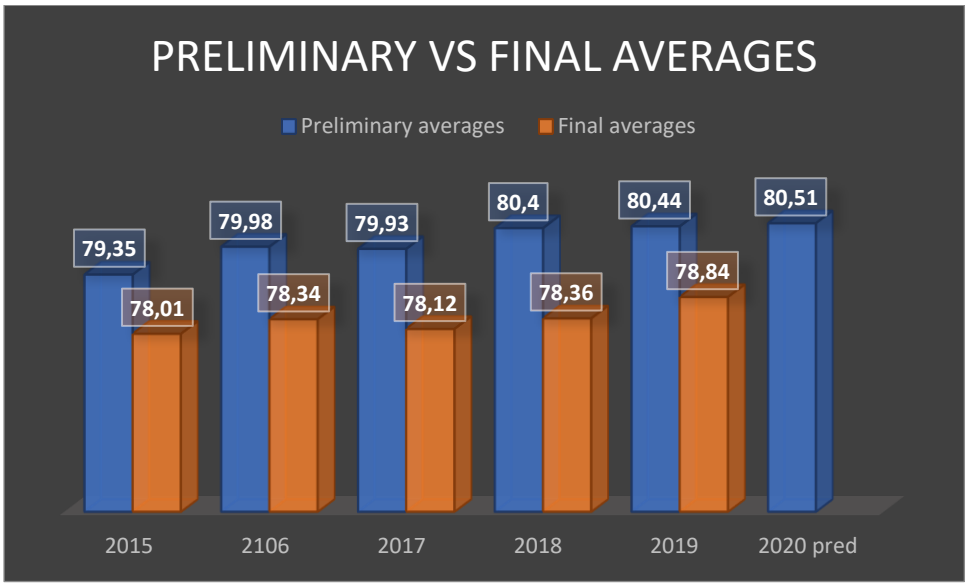
In order to safeguard the credibility of the European Baccalaureate Diploma, it might be necessary to apply a moderation, as already decided by the Board of Governors.

Rational

Overall averages

First of all, let us examine which would be some evidences that might justify/require the use of a moderation to determine the final marks.

The **mean** (or average) of preliminary and final marks of the years 2015 to 2019 are shown in the chart below as well as that of the final marks for 2020 calculated using A1, A2 and B1 marks only (A2 marks are not yet known for 2020, so the A1 marks have been replicated as a prediction for the A2 marks; for the sake of simplicity, we will refer to these as "preliminary marks").



The overall averages of preliminary and final marks have always registered a drop, which has ranged between 1.34 and 2.04 marks.

Proposal: the moderation should decrease the mean of 2020 "preliminary marks" from the simulated 80.51 to somewhere between 78.5 (80.51-2.04=78.47 rounded to 78.5) and 79.2 (80.51-1.34=79.17 rounded to 79.2). The maximum and minimum decrease

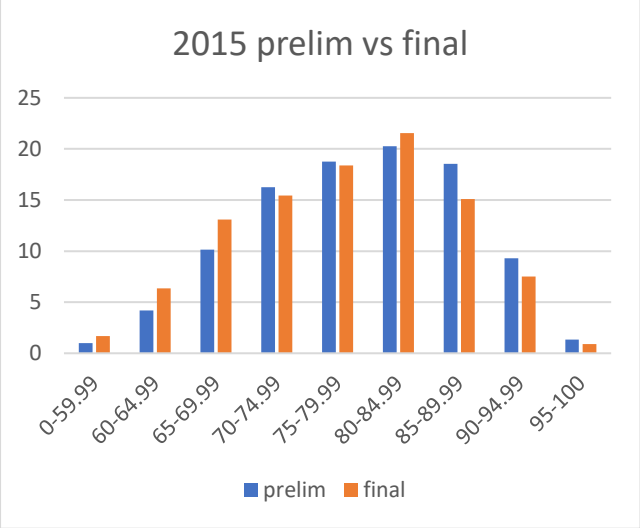
registered in the past years would be used as a reference range. It should also be noted that the average of the final marks ranged from 78.02 to 78.84 in the past five years.

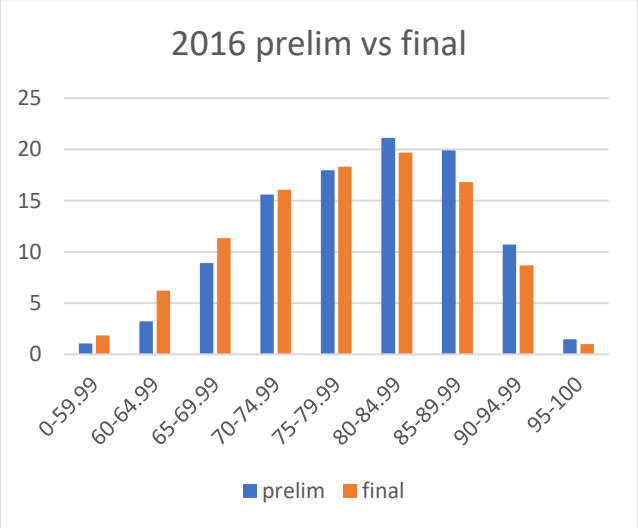
To achieve this, one possibility would be to apply a “uniform” moderation (where every student’s final mark is decreased by the same value so as to guarantee the expected mean). Distributions of final marks were compared to evaluate the efficiency of such an approach.

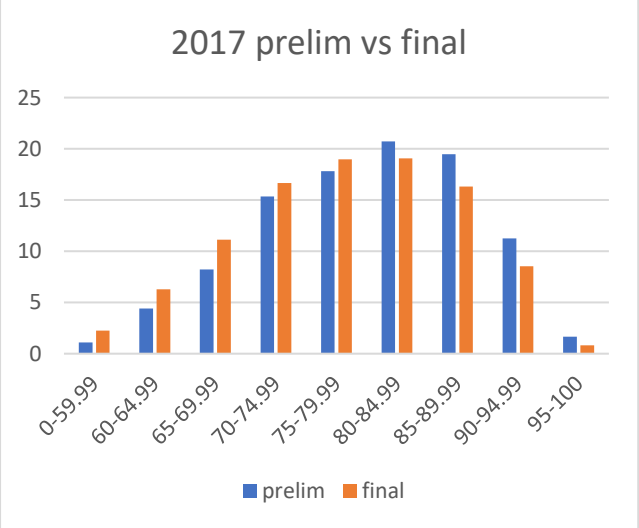
Preliminary marks and final marks distributions

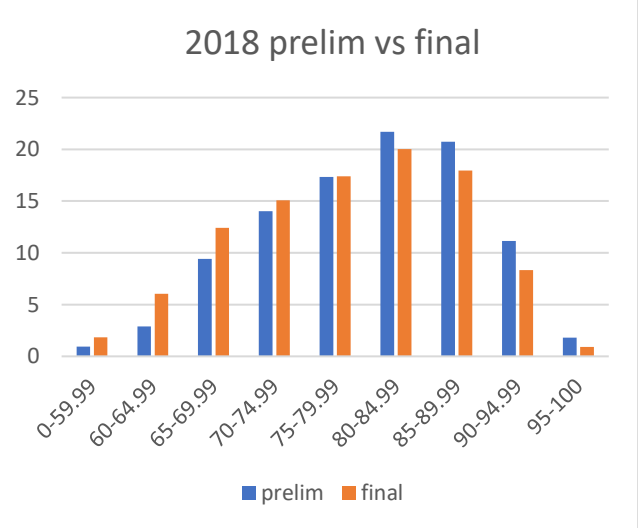
For the past 5 years’ European Baccalaureate sessions the distribution of final marks calculated only using A1, A2 and B1, significantly differed from the real final marks.

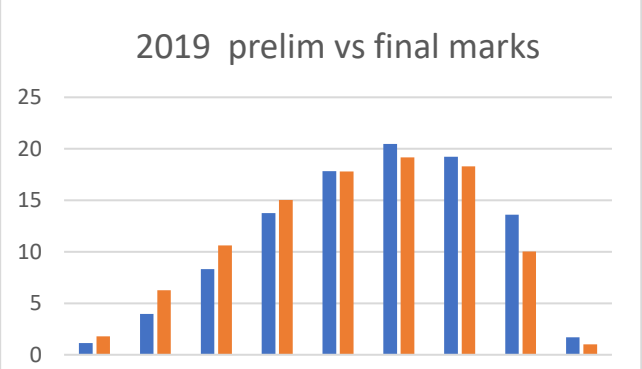
This is illustrated in the following diagrams comparing preliminary and final marks for each year from 2015 to 2019.





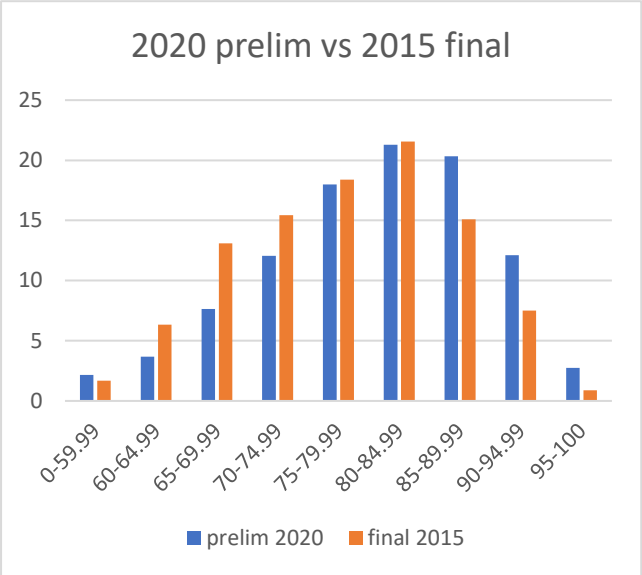


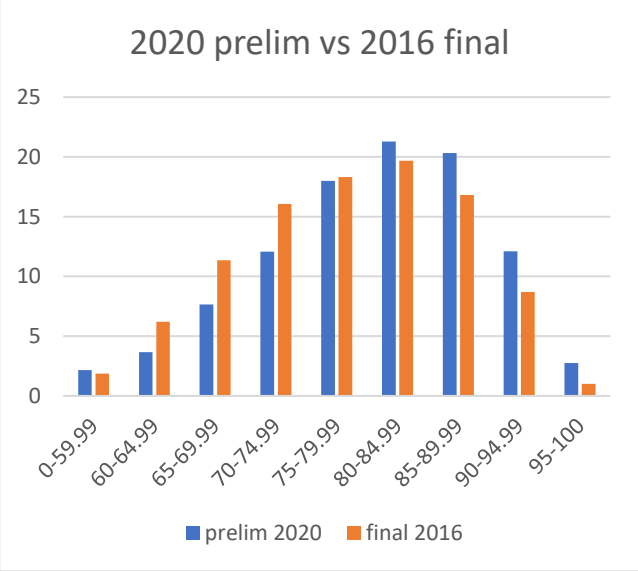


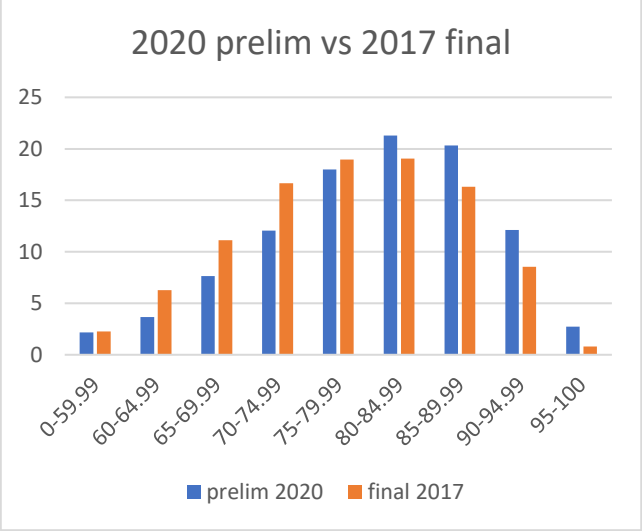


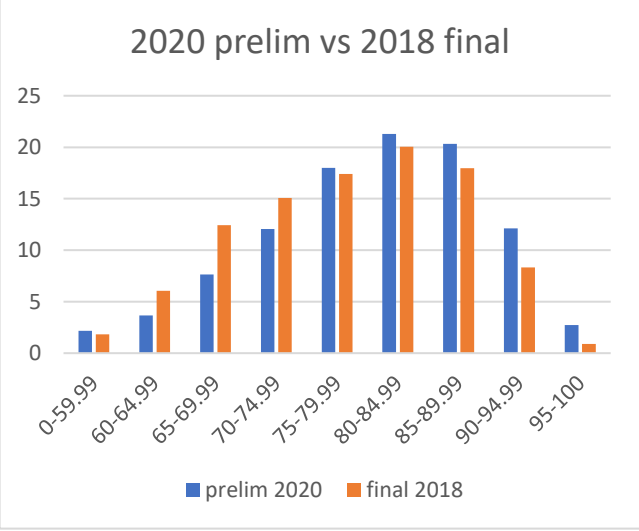
Comparison of the distribution of this year's final marks calculated using only preliminary marks with the previous years' final marks distributions also shows a significant difference.

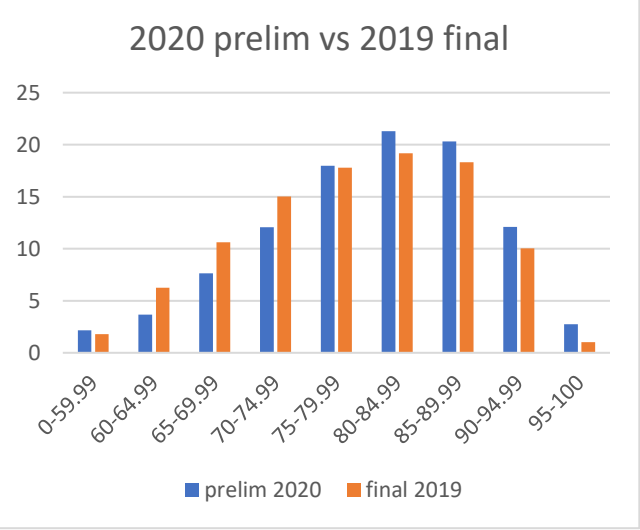
The graphs below show the distribution of final marks from the various years compared to the preliminary results of this year.





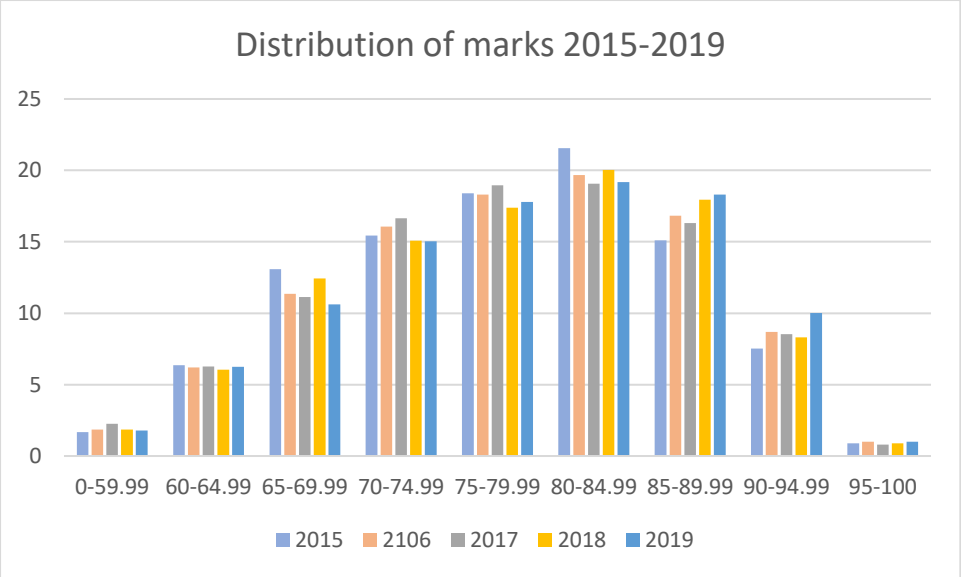


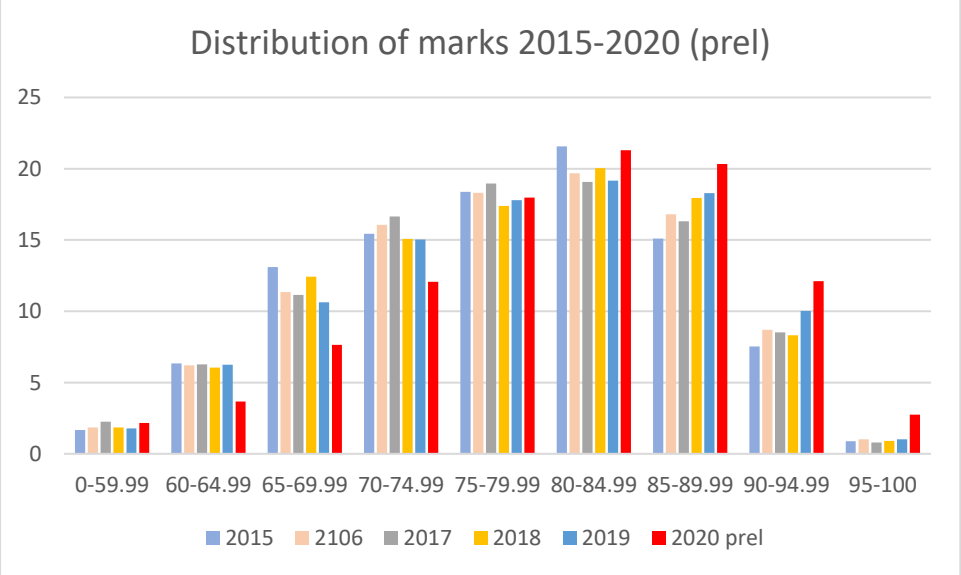




Comparing the shape of the preliminary and final mark distributions, it can be safely concluded that it is not enough to apply a uniform moderation. In fact, this would not help to reduce the difference of distributions and the distribution of the marks would still strongly differ from the ones of the previous years.

To further investigate the necessity of a moderation, the following graph shows the distribution of final marks in the last 5 years, followed by a graph which also includes preliminary marks from 2020.





The distribution of preliminary results for 2020 (red bars) is remarkably different from that of the final marks of the previous years.

Proposal

1: In order to get a distribution of results in line with the ones in the previous years, a "final" distribution could be agreed upon. Students' results would be grouped in cohorts each (but the first one, grouping all failing pupils) corresponding to a range of 5 marks: 0 to 59.99, 60 to 64.99, 65 to 69.99, etc. In order to decide on the "ideal" one, "ranges" for the percentages of students in each cohort in the data of previous years would be used. The final decision about what distribution to adopt (i.e. which percentage to use for each class) would then lie with the body responsible for the moderation of the results. Once this decision is made, we have the "ideal" percentage of students with marks 0 to 59.99, 60 to 64.99, etc.

2: No student with an overall "preliminary" result of at least 60 would fail. This implies that the number of students in the "0 to 59.99" cohort might have to be reduced.

3: Check that the highest score would fall into the range of highest scores of the past years.

4: Use linear interpolation to calculate the moderated final marks. Thus, the target distribution and final marks of all pupils are obtained.

5: Verify if the overall mean falls in the expected range.