



**Follow-Up Report regarding the implementation of Bar-Ilan
University - Statistics**

May 2012

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Chapter 1 - Background

In early 2010 an International Committee appointed by the Council for Higher Education (CHE) evaluated the study programs in the field of statistics. The Committee evaluated statistics programs in four universities: the Hebrew U, Tel Aviv, Haifa, and Bar Ilan, and submitted its reports to the CHE in May 2010.

The committee consisted of:

- **Prof. Abba M. Krieger, Statistics Department, Wharton School, University of Pennsylvania – Committee Chair**
- **Prof. Robert Adler, Faculty of Industrial Engineering and Management and the Faculty of Electrical Engineering, the Technion**
- **Prof. Peter Bickel, Department of Statistics, University of California, Berkeley**
- **Prof. Onno Boxma, Department of Mathematics and Computer Science, Eindhoven University of Technology**

The CHE discussed the Committee's Reports in January 11, 2011, and among other things, included in its decision a special reference to Bar Ilan's Statistics Program the following:

“Regarding the Program in Statistics at Bar Ilan University: A) To acknowledge the university's action in implementing the review committee's recommendation regarding study tracks and recruitment of faculty in the field B) Following the review committee's recommendation, a committee will be established to examine the progress of the implementation of the report's recommendations.” (see paragraph 6 in the CHE decision – attached as appendix 4)

Accordingly, a follow-up committee was appointed by the CHE as follows:

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- **Prof. Robert Adler, Faculty of Electrical Engineering, Technion- Chair.¹**
 - **Prof. Ya'acov Ritov, Department of Statistics, Hebrew University.**
 - **Prof. Yaov Benjamini, The Department of Statistics and Operations Research, School of Mathematical Sciences, Tel Aviv University.**

Ms. Maya Alayoff - Coordinator of the Committee on behalf of the Council for Higher Education.

¹ Prof. Adler was a member of the International Evaluation Committee

Chapter 2 – The Follow-Up Committee Procedures

The Committee members received a follow-up report regarding the statistics program in the Department of Mathematics in Bar Ilan University in February 2012.

The Committee held its first meeting on March 22, 2012, during which it discussed Bar Ilan's follow up report in order to understand the extent of progress the Department of Mathematics in Bar Ilan University had made, and what issues need further discussions.

On April 18, 2012 the Committee visited the Department of Mathematics in Bar-Ilan University. During the visit, the Committee met with the Dean of Faculty of Exact Sciences, the Chair of the Department of Mathematics and Vice-Chair of the Department of Mathematics- in charge of the Statistics study program.

(The schedule of the visit, including the list of participants, is attached as Appendix 2).

The Committee thanks the management of Bar-Ilan University and the Department of Mathematics for their implementation report and for their hospitality towards the Committee during its visit at the institution.

Chapter 3: Review of implementation

There were two main recommendations made by the original committee: the urgent need to recruit faculty members in statistics and to modernize the program and courses in statistics, the latter with the help of an appropriate standing faculty at another university in Israel.

The current committee found that neither of these recommendations had been brought to fruition, and, in fact, was not convinced that either had been taken seriously by the Department of Mathematics or by the university's senior administration.

1: Faculty:

The issue of new faculty is a crucial one: There have been no statisticians at Bar Ilan for a number of years, and while it may be possible to continue to run a statistics program for a short time without faculty, continuing under the momentum generated in better times, the Bar Ilan program has long since passed this grace period.

It is not easy to find young academic statisticians in Israel. In fact, the national shortage was a problem discussed in detail in the original report, and competition between the universities is fierce. However, the committee was not convinced that Bar Ilan has been seriously involved in this competition. Although both the original and current committees heard from the Administration that they were supportive of appointing statisticians, they also heard that the structure at Bar Ilan is such that the initiative must come from the Department. This initiative seems to be missing.

~~There still seems to be some disagreement with the Department of Mathematics as to~~
 how strongly it wishes to support statistics, and the current committee heard again the desire that any statisticians who might be appointed should integrate well with mathematicians. The current committee, however, agrees with the previous one, which noted that ... *statistics is evolving in ways where areas other than mathematics have also become extremely attractive (e.g., computer science). Such candidates will not necessarily have many common interests with pure mathematicians.* It also

suggested that a solution to this problem might be to ... *create a center or a graduate program that will attract faculty in statistics or related research interests under one umbrella. Since statistics by its nature is interdisciplinary, research interests span a large number of areas. A program or center that might be a second home for faculty members in various departments such as mathematics, computer science and biology could be a way to establish a critical mass of faculty who are involved in empirical research and as such, have some common interests.*

None of these options have been seriously explored, and no appointments have been made.

In addition, informal discussions with candidates who, in the last year or two, approached Bar Ilan but later took up positions at other universities in Israel indicate that their treatment by Bar Ilan was lukewarm at best. The committee is unable to evaluate whether this is a problem specific to these candidates, to statistics candidates in general, or is a wider problem perhaps related to the appointment procedures at Bar Ilan.

The Committee's conclusion, therefore, is that it is unlikely that Bar Ilan will make any statistics appointments in the near future, nor be able to build a viable group in the foreseeable future.

2: Course structure and syllabi:

The Committee was both surprised and disappointed by the Department's lack of progress in modernizing the course structure and syllabi in statistics.

The Mathematics Department did not follow the original committee's suggestion of obtaining the assistance of a senior statistician from outside Bar Ilan for this task. The current committee was unable to obtain an explanation from the Chair of Mathematics as to why this was the case beyond "we considered this, and decided not to do it".

Consequently, the changes that were made were carried out by a committee of two probabilists and one algebraist. The result was a program that was even further

removed from current statistical educational practice than the previous one, although it does have the advantage that it more efficiently uses the (non-statistical) teaching expertise currently available to the department.

The Committee feels that the current program is too far removed from current statistical thinking for its graduates to be able to advertise themselves as competent statisticians at its conclusion. Nor does it believe that this situation is likely to change until such time as the teaching of statistics at Bar Ilan is treated seriously, either by making a number of appointments in the area or, at the very least, obtaining external guidance.

Chapter 4: Recommendations

Before making specific recommendations it should be noted that Bar Ilan has frozen its graduate program in statistics, as well as its undergraduate minor. The only remaining program leads to a degree with the title “Extended BSc in Mathematics and Statistics”.

During the visit at Bar Ilan, the following options were raised as possible recommendations of the Committee:

1. Recommend to the University that it invest massively in slots for statisticians.
2. Continue with the current situation: i.e. All programs frozen bar one with continuing attempts to appoint faculty.
3. Freeze the remaining unfrozen program.
4. Formally close all programs in statistics.

While the Committee would most like to see Option 1 implemented, given recent history it does not believe this is feasible.

Option 2 is essentially the option under which Bar Ilan has been operating for some years, steadily freezing more programs and (half heartedly, as far as the Committee can determine) attempting to appoint new faculty. The committee believes that this status quo should not be continued any longer.

The remaining two options are equivalent in the short term, in that both lead to no ~~degrees in statistics being offered by Bar Ilan in the near future.~~ The differences between them are more long term. If all programs are formally closed, it is unlikely that Bar Ilan will ever try to reopen them in the future. Freezing the programs will allow them to be opened if and when the staffing situation permits.

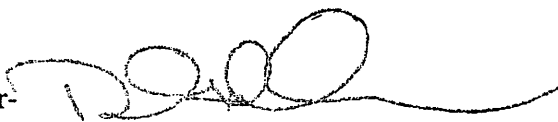
While the current situation is severe enough to justify closure, the Committee nevertheless recommends a compromise path, based on the importance of statistics as an academic discipline and the need for qualified statisticians in Israeli industry.

We recommend that all degree granting statistics programs - under any structure - at Bar Ilan be frozen immediately, and that they not be reactivated without the approval of an ad hoc CHE committee of statisticians. This committee should be formed when Bar Ilan indicates that it wishes to reactivate one or more of its statistics programs.

In the meantime, it is clear that Bar Ilan needs to invest in a vigorous recruiting program, along the multi-disciplinary lines recommended in the original report. The Committee believes that this will require support and guidance at the higher levels of university administration, and cannot be left to the Mathematics Department to carry out by itself.

Signed By:

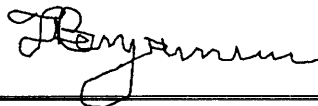
Prof. Robert Adler, Chair-



Prof. Ya'acov Ritov-



Prof. Yaov Benjamini-



APENDIX 1

Letter of Appointment



שר החינוך
Minister of Education
وزير التربية والتعليم

לי כסלו, תשע"ב
26 דצמבר, 2011

לכבוד

פרופ' רוברט אדלר, הפקולטה להנדסת חשמל, הטכניון
פרופ' יואב בנימיני, המחלקה לסטטיסטיקה אוניברסיטת תל-אביב
פרופ' יעקב ריטוב, המחלקה לסטטיסטיקה האוניברסיטה העברית

נכבדיי,

הריני מתכבד למנותכם כחברים בוועדה של המועצה להשכלה גבוהה אשר תפקידה לבחון את התקדמות יישום ההמלצות המופיעות בדו"ח הוועדה להערכת איכות הלימודים בסטטיסטיקה באוניברסיטת בר-אילן.

בהתאם להחלטת המועצה להשכלה גבוהה מיום 11.1.11 בנושא דו"חות הוועדה להערכת איכות הלימודים בסטטיסטיקה מתבקשת הוועדה לבחון את הנושא ולהגיש למועצה להשכלה גבוהה עד חודש יוני 2012 דו"ח מסכם בדבר יישום ההמלצות, לרבות התייחסות לשאלת המשך הפעלת התכנית לסטטיסטיקה באוניברסיטת בר-אילן.

פרופ' רוברט אדלר יכהן כיו"ר הוועדה.

גב' תמר מעגן-אפרתי תרכז את עבודת הוועדה.

אני מאחל לכם עבודה פורייה.

בברכה,
[חתימה]
נדעון סער,
יו"ר המועצה להשכלה גבוהה

APENDIX 2

Schedule of the Visit

**ביקור הוועדה לבחינת יישום המלצות הוועדה להערכת איכות בסטטיסטיקה-
אוניברסיטת בר אילן**

יום ד', כ"ו ניסן, 18/4/2012 - חדר 251 במחלקה למתמטיקה (בניין 216)

09:00-10:00 - ישיבה סגורה של חברי הוועדה.

10:00-10:30 - מפגש עם דיקן הפקולטה למדעים מדויקים - פרופ' חיים סוקניק.

10:30-12:00 - מפגש עם ראש מחלקת מתמטיקה - פרופ' רון עדין וסגן הרמ"ח - פרופ' עוזי וישנה.

12:00-12:45 - ישיבה סגורה מסכמת של הוועדה + ארוחת צהריים קלה (כריכים).