# InterPARES Trust Project Report



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#### **Abstract**

In this final report we used the formula we developed in the previous stage on returning visitors, as a parameter for appraising archival material of selected sections of the Israel Ministry of Foreign Affairs website in English. In addition, we also attempted to obtain a parameter for selected countries and visits by users from them to the various sections. Due to the nature of the website – mainly publicity and public relations – the social value is the most important one in the appraisal of this material. Additional factors that may have an influence are the frequency of changing the material in the various sections; mention of special events; and changes for technical reasons and content.

The Google Analytics data were analyzed during 11 months, and were presented in six tables and two diagrams using Excel spreadsheets. The first three tables relate to the various sections by month: page views by returning visitors, average time spent by returning visitors, formula results per section and month, rating the sections by month, total average of formula results and standard deviation.

The countries selected meet the criteria of developing and developed countries. Here the formula served all the visitors, due to the fact that with regard to countries, Google Analytics did not provide data on returning visitors only. The tables present: page views; average time spent by visitors to the section; rating of sections by countries; and the results of the formula and ratings of countries, respectively, total average of formula results and standard deviation. The diagrams present the sections that are above the average, and their ratings according to months.

The results of the study and analysis of all the above show that the number of visitors influences the results of the formula more than a longer average time spent by returning visitors to a section with a smaller number of visitors. The results of the mathematical analysis need to be examined for a longer period of time (approximately 52 months), in order to achieve reasonable results. In any case, a repeat study of the data must be conducted within a specific period of time. In conclusion, the mathematical calculations may provide a clear indication for the appraisal, but can not constitute an exclusive factor. We must take into account additional factors, including the human factor of the appraiser.

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### Introduction

In our interim report we arrived at a formula for time spent in the sections. In this final report we will show the implications of this formula for various sections on the website; and the implications of the attempt to apply it to an analysis of the subject of visitors according to sections and countries, and sections within each of the chosen countries.

The formula for time spent on a page by returning visitors includes the following elements:

The number of page views by returning visitors x average time spent on a page by returning visitors x (1-%Exit) = appraisal metric.

The formula differentiates between new and returning visitors. The formula uses the data of returning visitors because they show more interest in the information found in the section. As shall be seen below, the formula can be used not only for returning visitors, but for all visitors.<sup>1</sup>

In order to reach a result, we take the number of page views by returning visitors multiplied by average time spent on a page by returning visitors. The last part of the product consists of the %Exit, which represents those leaving the page; then 1-%Exit = those remaining on the page, and the product gives the estimated total number of hours spent by returning visitors on a specific section during a specific period of time.

The higher the resulting figure, the higher the level of interest. Thus, it may perhaps serve as a parameter for appraisal. It may then be possible to determine a minimum

<sup>&</sup>lt;sup>1</sup> Our thanks to Amihai Feigenbaum, of the Department of Information Science at Bar-Ilan University, for his important contribution in calculating the formula, and editing the tables and diagrams that appear in the body of the project.

threshold of the metric, and if it is not passed, the material will not be destined for permanent retention.<sup>2</sup>

# Appraisal of the Archival Material on the English Website of the Israel Ministry of Foreign Affairs, in Actual Practice.

From an analysis of the data by Google Analytics (GA) (%Exit, Total Hours in Section, Average Time, Page Views and Countries) of the three sections – MASHAV, Foreign Policy, About Israel – which serve us in examining the website; and taking into account the qualitative research performed among those responsible for the subject in the ministry; <sup>3</sup> it can be determined that an overall appraisal of the Ministry of Foreign Affairs website should not be performed; but rather, there is a need to consider each sub-site or section in determining the retention schedules. However, over-specification should not be performed below that level, except for cases of sections related to administrative activities such as in MASHAV and Consular Services, for which it is possible, in principle, to apply the retention schedules specified for each section in the Archives Law. <sup>4</sup> In any case, with regard to MASHAV, it appears that there will be a need to incorporate the visitors element, due to the publicity-public relations aspect of the sub-site.

The traditional parameters of appraising archival material – the administrative value and the legal value – can not be found on the website. They are covered by the conventional and digital documents of the ministry, which serve it in its daily functioning. As for the research value, it is reasonable to assume that the researcher will not examine issues related to the function and activities of the Ministry of Foreign Affairs, or any other subject in which the ministry might have been involved. That's what the historic administrative archives are there for; although on the website of the ministry the material may be presented and organized differently than in the internal systems of the ministry, and may present a picture different from them. However, the researcher may, for example, examine the manner in which operational decisions are applied by use of the website, through the publications or public announcements that appear on it, by comparing them with the formal records, on condition that they are open to the public. The social value that can be attributed to a website is based mainly on the opinion of citizens who

<sup>&</sup>lt;sup>2</sup> Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records-Interim report (EU25). p. 21.

<sup>&</sup>lt;sup>3</sup> Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records - Interim report (EU25). pp. 21-24, 26.

<sup>&</sup>lt;sup>4</sup> Schenkolewski-Kroll S. & Tractinsky A. (July 7, 2015) Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs case study - (EU01). pp. 22-27

will determine which records will remain for future generations, and represent them (Hans Booms). <sup>5</sup> Without comparing between total representation of citizens as proposed by Booms' theoretical approach, and a specific choice such as website records, it appears to be possible to apply the social aspect to most parts of a website; because its main element is the quantity of visitors and its implications, such as returning visitors or the time they spend on the site.

As mentioned in previous reports, the publicity-public relations nature of the site places the issue of visitors in a preferred position in the parameter scale for appraisal, and may even give it exclusive rights. In records of this nature the quantity and repeated time on a page are indications of interest; that is, a sign of success in achieving the goal that the ministry set itself in creating the site and operating it.

We defined our main research population- returning visitors – and found that most visitors visit the site once, and do not return to it. On the other hand, returning visitors are counted at least twice, since the overwhelming odds are that they return because they found information in the pages on the site, and/or they know from past experience which information is likely to be found there. Therefore, counting returning visitors is most significant for examining and determining the importance of sections for appraisal.

An analysis of data from Google Analytics, which makes it possible to determine the quantity of new and returning visitors, and the amount of time they spend in a repeat visit to the section; as well as an analysis of returning visitors in sections with few visitors, but ones who spend relatively more time there; and finally, an analysis of those same data according to countries; all these may give an indication of interest in a particular part of the site, and the subjects it presents.

A factor that may have an influence on visitors' behavior is the rate of changes made on records posted on the site. Does the pace of additions and deletions of complete subjects or specific texts, in each section, determine or influence the behavior of visitors? And can that be used to determine the periods of time of conducting the examination process by applying the formula? It may well be that a comparative test between visitors' fluctuations and changes of materials on the site would confirm that assumption. In any case, the frequency of changing the records on the site, and the decision when to conduct the appraisal or not, <sup>6</sup> is a parameter

<sup>&</sup>lt;sup>5</sup> Schenkolewski-Kroll S. and Tractinsky A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records- Interim Report (EU25). p. 2 and Booms, H. "Uberlieferungsbildung: Keeping Archives as a Social and Political Activity, Archivaria, 33, 1991, pp. 25-33.

<sup>&</sup>lt;sup>6</sup> Throughout the years, documents were not deleted from the Ministry of Foreign Affairs website, but were kept on the site even after it was upgraded in 2013.

that must be taken into account. Another option is an arbitrary determination of every six months, for example.

In addition to the parameters of visitors and the replacement of information in the sections, is it feasible to include a parameter of the importance of events and their posting on the website, such as cases of war, terrorist attacks or the opposite - peace agreements or the Olympic Games? Is it possible to determine in advance a list of events or topics to be taken into account? This is where the human factor of the traditional appraisers (the creators of the records which served as the raw materials for the site, legal advisors, operators of the site itself, and expert archivists) comes into effect. They must arrive at a balanced list of subjects, not too specific, which will define the events or processes appearing on the site that must achieve permanent preservation; while leaving sufficient maneuvering space to enable people to make decisions based on the specifics of each case. That question has remained open till now.

In addition, changes for technical or content reasons, or changes of the program itself, should be a cause for applying parameters for appraisal in accordance with the new data, and to determine changes in the rules, for future use.

### **Google Analytics Data – Visitors Returning to the Section**

On the English website of the Ministry of Foreign Affairs 12 sections were identified: Consular Services, About the Ministry, Press Room, Foreign Policy, About Israel, Israel Experience, International Organizations, Innovative Israel, MASHAV, MFA Archive, Israel under Fire and Diplomacy in Video. Google Analytics presents 28 sections – the 16 other sections are multiples of the existing sections, and sections of other Ministry of Foreign Affairs sites, in different languages. The reason for that is the technical structure of the site, and its faulty maintenance. The quantity of visits into those superfluous sections is very low, so that the influence on the results of the GA is minimal.

The Google Analytics data were presented in a formula (see p.5) during 11 months, between October 2015 and August 2016, and as a result a list of time spent in the various sections for each month was obtained. These results were ranked from the highest result to the lowest result in each one of them, and were allotted numbers in a diminishing order, with the first result receiving 1, the second 2, etc. After that the average of the results was calculated for the entire period of time using a digital spreadsheet (Excel). The average that was determined was 4.4435211709. For the rest of the research, only the sections above that average were taken into consideration.

In Table 1 we can see a partial example of the section data out of 11 months. It presents, from left to right, the following columns: the months examined, the sections, page views, average time spent in the section in decimal data, average time spent converted to time units, percentage of exits, and the results of the formula that was developed in decimal data (Func rslt).

<u>Table 1 – Section Data, as Derived from Google Analytics, their Average and Rank</u>

Month -	Section	Pagevie -	Avg. Tir ▼	Fixedav -	% Exit	Func rslt 💌	Ran	Func as time	Avg
Oct15	/foreignpolicy/	16886	138.54	00:02:19	43.33%	15.34363	2	15.08:14:50	4.43521
Oct15	/aboutisrael/	12331	139.18	00:02:19	46.53%	10.62084	3	10.14:54:01	
Oct15	/consularservices/	11755	123.12	00:02:03	50.40%	8.307778	5	08.07:23:12	
Oct15	/pressroom/	11234	111.06	00:01:51	40.67%	8.567188	4	08.13:36:45	
Oct15	/mashav/	5480	133.29	00:02:13	45.78%	4.583368	6	04.14:00:03	
Oct15	/mfa-archive/	3026	193.75	00:03:14	60.18%	2.70213	7	02.16:51:04	
Nov15	/foreignpolicy/	19572	141.28	00:02:21	47.03%	16.95309	2	16.22:52:27	
Nov15	/aboutisrael/	13134	140.11	00:02:20	48.04%	11.06596	3	11.01:34:59	
Nov15	/consularservices/	12547	117.18	00:01:57	47.78%	8.886319	5	08.21:16:18	
Nov15	/pressroom/	11045	121.58	00:02:02	42.66%	8.911644	4	08.21:52:46	
Nov15	/mashav/	6511	119.45	00:01:59	39.33%	5.460764	6	05.11:03:30	
Nov15	/israelexperience/	4723	190.29	00:03:10	61.38%	4.017257	7	04.00:24:51	
Dec15	/foreignpolicy/	17577	144.21	00:02:24	46.79%	15.60963	2	15.14:37:52	
Dec15	/consularservices/	13698	111.27	00:01:51	45.91%	9.541273	3	09.12:59:26	
Dec15	/aboutisrael/	11293	136.85	00:02:17	48.25%	9.25669	4	09.06:09:38	
Dec15	/pressroom/	8720	104.97	00:01:45	36.92%	6.683623	5	06.16:24:25	
Dec15	/israelexperience/	6483	170.18	00:02:50	61.42%	4.926262	7	04.22:13:49	
Dec15	/mashav/	5791	132.21	00:02:12	40.39%	5.282106	6	05.06:46:14	

The results of the formula were converted by the Excel program from the decimal data into time units (Func as time). The results of the conversion include the number of days, hours, minutes and seconds, that are the total time spent by returning visitors in the section. Following that are the columns of rank, results of the conversion data and the average formula results. The calculation of the formula average was done as an automatic calculation of all the data in the column, by the Excel program. The calculation was done by adding all the data in decimal data and dividing by the number of records (sections) appearing in the file. The table included the results of sections above the average. The datum of the Pages section was removed, because that section is an artificial, technical section created by the site's program, so that it is irrelevant for our purposes.<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records- Interim report (EU25), p.12.

In Table 2 we see the results of the ranking in the various sections by months. The sections that have no consistency of data for the entire period were deleted from the list of sections that were examined.

Table 2 - Results of the Ranking in the Sections by Months

Section	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16	May16	Jun16	Jul16	Aug16
/aboutisrael/	3	3	4	4	4	4	3	3	5	5	6
/abouttheministry/								7	7		
/consularservices/	5	5	3	2	3	2	4	4	2	2	2
/foreignpolicy/	2	2	2	3	2	3	2	2	3	4	3
/israelexperience/		7	7	7	7	7	7			7	7
/mashav/	6	6	6	5	5	6	6	6	6	6	5
/mfa-archive/	7										
/pressroom/	4	4	5	6	6	5	5	5	4	3	4

Table 3 shows the monthly ranking of the above-average sections that have continuous data for all the months which were examined. In addition, it contains data on the average and standard deviation. Due to the scarcity of data that it was possible to collect in 11 months (there are no data from other times), the data in Table 3 and Diagram 1 only point to trends and not to clear results. In order to achieve clear results there was a need for data from at least 52 months. In the table, according to standard and standard deviation data, it appears that the Consular Services Section has the greatest fluctuation during the months that were examined.

<u>Table 3 - Ranking of Sections with a Continuity of Results for all the Months</u> Examined

Section	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16	May16	Jun16	Jul16	Aug16	Avg	Std
/aboutisrael/	3	3	4	4	4	4	3	3	5	5	6	4	0.953463
/consularservices/	5	5	3	2	3	2	4	4	2	2	2	3.090909	1.164204
/foreignpolicy/	2	2	2	3	2	3	2	2	3	4	3	2.545455	0.655555
/mashav/	6	6	6	5	5	6	6	6	6	6	5	5.727273	0.445362
/pressroom/	4	4	5	6	6	5	5	5	4	3	4	4.636364	0.881396

Diagram 1 shows a graphic representation of the results of five sections appearing during all the months studied (Table 3). The diagram shows the locations of the formula results of the sections in each month, with 1 being the highest and 7 being the lowest. Neither appears, for the reasons mentioned above (see p.9).

<sup>&</sup>lt;sup>8</sup> See the explanation of the fluctuations of Foreign Policy on page 11 below.

Section Rank per Month Jan16 Feb16 Mar16 Jul16 Oct15 Nov15 Dec15 Apr16 May16 Jun16 Aug16 1 3 /consularservices/ ——/foreignpolicy/ /aboutisrael/ /mashav/ -/pressroom/

<u>Diagram 1 – Graphic Representation of the Ranking of the Sections during all the</u>
Months

The Foreign Policy section achieved the highest ranking 6 times, and was followed by the Consular Services section, which achieved the highest ranking 5 times. MASHAV was the section that had the lowest rank the greatest number of times. The diagram shows the fluctuations of the sections during the months. Thus, for instance, the Foreign Policy section in the first three months of measurement is first in rank. In January it drops to second place, rises again in February to first place, drops in March, rises again in April and March, drops to third place in the following two months, and then rises again to first place. Thus it can be seen that, over and above ranking in importance between the various sections, it is possible to see the importance of sections in each month; which may point to a specific event that it would behoove us to consider.

## **Google Analytics – Sections and Countries**

Google Analytics' geographical data do not provide data on returning visitors, but only the total of visitors who visited the section. There is a possibility of retrieving the data of only returning visitors using various mathematical manipulations; however, there is no certainty that these data will be accurate. Data on total visits to the countries section that were selected from Google Analytics between the months of October 2015 and August 2016 were also included in the formula. The average among countries was calculated for these results. The results were ranked so that the highest result of time spent received the highest ranking, with the first result receiving 1, the second 2.

We examined the behavior of visitors, using Google Analytics, according to their countries of origin. Since the number of countries presented in Google Analytics covers all existing countries, a small number of countries were selected: Germany, Indonesia, Israel, Britain and the USA. They were selected according to countries

where English is spoken and those where it is not; as well as countries that are considered developed and developing. <sup>9</sup>

Later, we added a number of additional countries that are considered developing countries, Uganda, Ghana, Kenya, Nigeria, South Africa and Zambia, in order to examine their influence on the results of the MASHAV section. In total the data of 10 countries were examined.

Table 4 shows part of the cumulative data for sections and countries after including them in the formula, and calculating the average, as explained in Table 1.

<u>Table - 4 The Google Analytics Data by Sections and Countries, Formula Results, and Rank by Country</u>

Page path leve	Country	Pagevie\ *	Avg.Tim(*	Fixedavgtin	% Exit	Func rslt	Ran	FuncRsIttime	Avq
/mashav/	Ghana	6490	165.17	00:02:45	51.96%	5.96	1	005.23:03:16	4.885007
/consularservices	Ghana	2332	141.75	00:02:22	46.57%	2.04	2	002.01:03:36	
/pages/	Ghana	1177	157.09	00:02:37	36.11%	1.37	3	001.08:48:49	
/israelexperience/	Ghana	528	234.95	00:03:55	61.93%	0.55	4	000.13:07:04	
/aboutisrael/	Ghana	414	91.19	00:01:31	76.33%	0.10	10	000.02:28:57	
/innovativeisrael/	Ghana	414	163.63	00:02:44	47.10%	0.41	5	000.09:57:14	
/mfa-archive/	Ghana	402	182.70	00:03:03	69.90%	0.26	6	000.06:08:27	
/pressroom/	Ghana	327	197.68	00:03:18	68.50%	0.24	8	000.05:39:21	
/abouttheministry/	Ghana	235	103.05	00:01:43	19.57%	0.23	9	000.05:24:37	
/foreignpolicy/	Ghana	195	248.98	00:04:09	55.90%	0.25	7	000.05:56:52	
/internatlorgs/	Ghana	75	46.96	00:00:47	38.67%	0.03	11	000.00:36:00	
/videolibrary/	Ghana	11	178.00	00:02:58	54.55%	0.01	12	000.00:14:50	
/mfade/	Ghana	6	0.00	00:00:00	100.00%	0.00	13	00:00:00:00	
/aboutisrael/	Germany	9207	93.91	00:01:34	49.16%	5.09	4	005.02:06:22	
/abouttheministry/	Germany	2142	94.59	00:01:35	38.33%	1.45	8	001.10:42:27	
/consularservices	Germany	12171	116.09	00:01:56	51.48%	7.93	3	007.22:25:07	
/foreignpolicy/	Germany	13578	129.65	00:02:10	55.37%	9.09	2	009.02:14:53	
/innovativeisrael/	Germany	1246	128.83	00:02:09	77.45%	0.42	12	000.10:03:22	
/internationallaw/	Germany	29	90.92	00:01:31	58.62%	0.01	15	000.00:18:11	

The table shows, from left to right, the following data columns: sections, countries, visitors (first time and returning, together), page views), average time in decimal data, fixed average time in time data, % Exit, formula results (Func rslt), and rank per country. Following that, the column 'func as time' appears, containing the conversion of the formula results 'func rslt' to time units, as explained above (see p. 9).

As stated above, there is no possibility of producing data on returning visitors directly from Google Analytics. In the table the data were arranged according to the

<sup>&</sup>lt;sup>9</sup> Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records- Interim report (EU25). p. 16. In the present report we did not deal with data on the State of Israel.

country, with each country containing data from the various sections. The average of the results was calculated in a similar manner to that in the table of returning visitors, and it was found to be 4.88500677122701. The rank formula was calculated in a slightly different manner compared to that of the returning visitors. Since the number of sections with data differed from country to country, each country had its ranking calculated separately. Due to that, the data are not arranged consecutively, because it was not possible to define a uniform minimum and maximum number of columns for all the countries.

Table 5 shows the section data according to the various countries. Among the various data can be seen the data of sections that did not rise above the monthly average, such as Innovative Israel, International Organizations, etc., which were later removed from the research. We can also see that the data of the Pages section remained, since they were not uniform and clearly separated, in contrast to the case with returning visitors data, and therefore they are integrated in the rest of the sections.

Table 5 – Section Data in the Various Countries

Section	Germany	Ghana	Indonesia	Kenya	Nigeria	South Africa	Uganda	United Kingdom	United States	Zambia
/aboutisrael/	4	10	3	2	4	3	6	4	1	3
/abouttheministry/	8	9	8	9	10	9	7	6	8	8
/consularservices/	3	2	5	4	2	2	2	1	2	1
/foreignpolicy/	2	7	4	6	7	7	9	2	3	10
/innovativeisrael/		5	9	10	6	8	10	10	9	
/internatlorgs/										9
/israelexperience/	6	4	6	8	5	6	8	8	5	6
/mashav/	10	1	10	1	1	5	1	9	10	2
/mfa-archive/	7	6	7	7	8	10	4	7	7	7
/mfade/	9									
/pages/	1	3	1	3	3	1	3	3	4	4
/pressroom/	5	8	2	5	9	4	5	5	6	5

On the left of Table 6 we can see all the sections that have data on all the countries. In addition, we can see an average for each section and the standard deviation from the average. The average in a section was calculated by adding the rank number in each country and dividing by 10 – the number of countries.

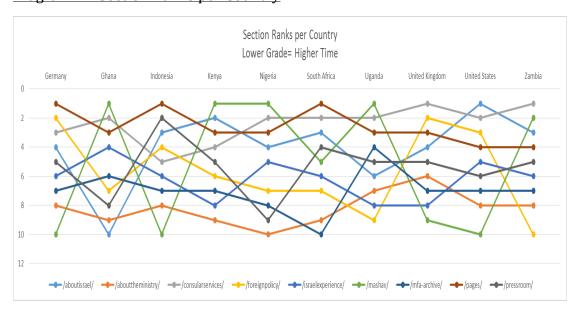
As noted above (see p. 10), the data on standard deviation in this research are insufficient due to the small number of months; a total of 11 months in which the examination was performed, isn't enough in order to achieve more accurate results; they therefore reflect only directions of the sections' behavior patterns, among the various countries.

<u>Table 6 – Ranking of the Countries in Sections, Averages and Standard Deviations</u>

sction	Germany	Ghana	Indonesia	Kenya	Nigeria	South Africa	Uganda	United Kingdom	United States	Zambia	avg	std
/aboutisrael/	4	10	3	2	4	3	6	4	1	3	4	2.366432
/abouttheministry/	8	9	8	9	10	9	7	6	8	8	8.2	1.077033
/consularservices	3	2	5	4	2	2	2	1	2	1	2.4	1.2
/foreignpolicy/	2	7	4	6	7	7	9	2	3	10	5.7	2.685144
/israelexperience/	6	4	6	8	5	6	8	8	5	6	6.2	1.32665
/mashav/	10	1	10	1	1	5	1	9	10	2	5	4.049691
/mfa-archive/	7	6	7	7	8	10	4	7	7	7	7	1.414214
/pages/	1	3	1	3	3	1	3	3	4	4	2.6	1.113553
/pressroom/	5	8	2	5	9	4	5	5	6	5	5.4	1.854724

Diagram 2 shows data on those visiting sections as they were ranked in each one of the countries. The sections Innovative Israel and International Organizations were removed from this diagram, due to incomplete data. These data were presented in Table 6.

<u>Diagram 2 – Section Ranks per Country</u>



The diagram shows that Consular Services is the section that receives the highest values, and About the Ministry receives the lowest values. The most stable section, from the aspect of its ranking among those visiting in the various countries is About the Ministry. In comparison, the MASHAV section has great fluctuations from the aspect of its ranking each month.

### **Conclusion and Research Findings**

The purpose of this part of the research was to examine the behavior of visitors as a factor in appraising the information and records on the Ministry of Foreign Affairs website, using a method called Web Analytics. <sup>10</sup> At an earlier stage, in the visitors study, we used PIWIK <sup>11</sup> and later Google Analytics. <sup>12</sup> It is important to remember that the Google Analytics program was not fully integrated into the Ministry of Foreign Affairs website and, as a result, the calculations may not be completely accurate.

Of the three sections studied, we found that in the administrative sections such as MASHAV the number of visitors is low compared with other sections; but the time spent there is high, compared with other sections. In addition, we tried to define the geographical areas from which the returning visitors enter, and the time spent in the various sections, as parameters for appraisal.

In light of these things, we constructed a formula that combines the number of visits by the returning visitors population to a particular section, with the purpose of achieving an appraisal metric that would provide the possibility of comparing sections from the aspect of the interest in them among returning visitors, as well as from the geographical aspect.

We found that the numbers of those visiting the section influence greatly the results of the formula, and that the time spent in the sections influence it less. That is, a high number of visits ranked the section in a higher place; despite the fact that the time spent there was less than in another section, in which the number of visitors was smaller, and time spent was greater. <sup>13</sup> This situation resulted from the great differences between the quantity of returning visitors to sections with an informational aspect, and the number of returning visitors in a section with a partly administrative nature. This gap in the quantity of visitors between the two types of sections could not be covered by longer periods of time spent in a section of the second type. These results did not confirm our assumption that the longer time spent in a section, the greater the interest in it.

<sup>&</sup>lt;sup>10</sup> Schenkolewski-Kroll S. and Tractinsky A. (November 9, 2015). Research of Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records (Proposal). pp.1-2. See also in Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records-Interim report (EU25). pp. 5-6

<sup>&</sup>lt;sup>11</sup> Schenkolewski-Kroll S. & Tractinsky A. (July 7, 2015) Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs case study - (EU01). p. 27 and see in https://piwik.org/

<sup>&</sup>lt;sup>12</sup> On Google Analytics see in Schenkolewski-Kroll, S. and Tractinsky, A. (June 9, 2016) Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records- Interim report (EU25). pp. 5-10.

<sup>&</sup>lt;sup>13</sup> During the process of including the data in the formula, we attempted to overcome this problem by using the Log10 function in the Page Views data; or by applying a special ranking to the time data. Neither of these actions was successful.

Despite everything, we included the data in a formula and received five sections above the average that repeat every month during the 11 months of measurement. In addition, we received the changes in rank among the sections throughout the months, which points to the stability or lack thereof of the sections; which may be dependent on the events parameter.

The results of visits from geographical locations are also not unequivocal. Developing countries sometimes received low results in sections that should have received high results; whereas industrial countries received higher ones. Therefore, we added a number of developing countries that are supposed to need services from MASHAV, in order to see how that affects the results. Since this experiment did not bring about a change in the results, in order to explain them requires human involvement, such as the nature of the relations between a specific country and Israel, etc.

It seems that the formula we created may also be used in sites that are technically arranged in a different way than that of the Foreign Office. It appears that the formula and the ranking determined by it may be suitable for other situations and data. Practical experiments performed on other sites may confirm this assumption.

These results indicate that the indices that were selected are sufficient to create an appraisal metric that will provide a rank between the various sections. However, this is only a set of indicators that will propose to the appraiser which sections should be included in the appraisal; not as an absolute result, but as one of the parameters the appraiser must take into consideration. Despite the importance of the visitors' parameter in appraising archival material for a website, in accordance with the nature of that appraisal, additional parameters exist: how often the material in the section is changed; a list of worthy subjects; and a team of appraisers who must be taken into account, in appraising the contents of a site of this type. <sup>14</sup>

To date, we have only obtained data from Google Analytics for 11 months for each section; which quantitatively does not enable us to obtain statistically valid results from the formula, but only indications of direction. Even if we had a sufficient number of months (at least 52 months in each section), due to changes in taste or the variety of users, as well as technical problems that may arise, the recommendations obtained from the formula may still not be decisive over a period of time. In any case, they would require a repeat study being performed periodically; as is usual when conducting an appraisal of the material from time to time, in order to confirm the accuracy and scope of the long-term preservation policy of archival material on the website, in our case.

To sum up, for now mathematical-statistical calculations cannot claim to have the only parameter for appraising archival material from a website, without considering

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<sup>&</sup>lt;sup>14</sup> See pp. 7-8 for additional parameters and indices for appraisal.

additional factors, including the human factor, which should contribute to the successful conclusion of the task.

### Note:

The next issue in our research will be to define the meta-data required to preserve the authenticity of records that selected by appraisal and to prevent changes in them.