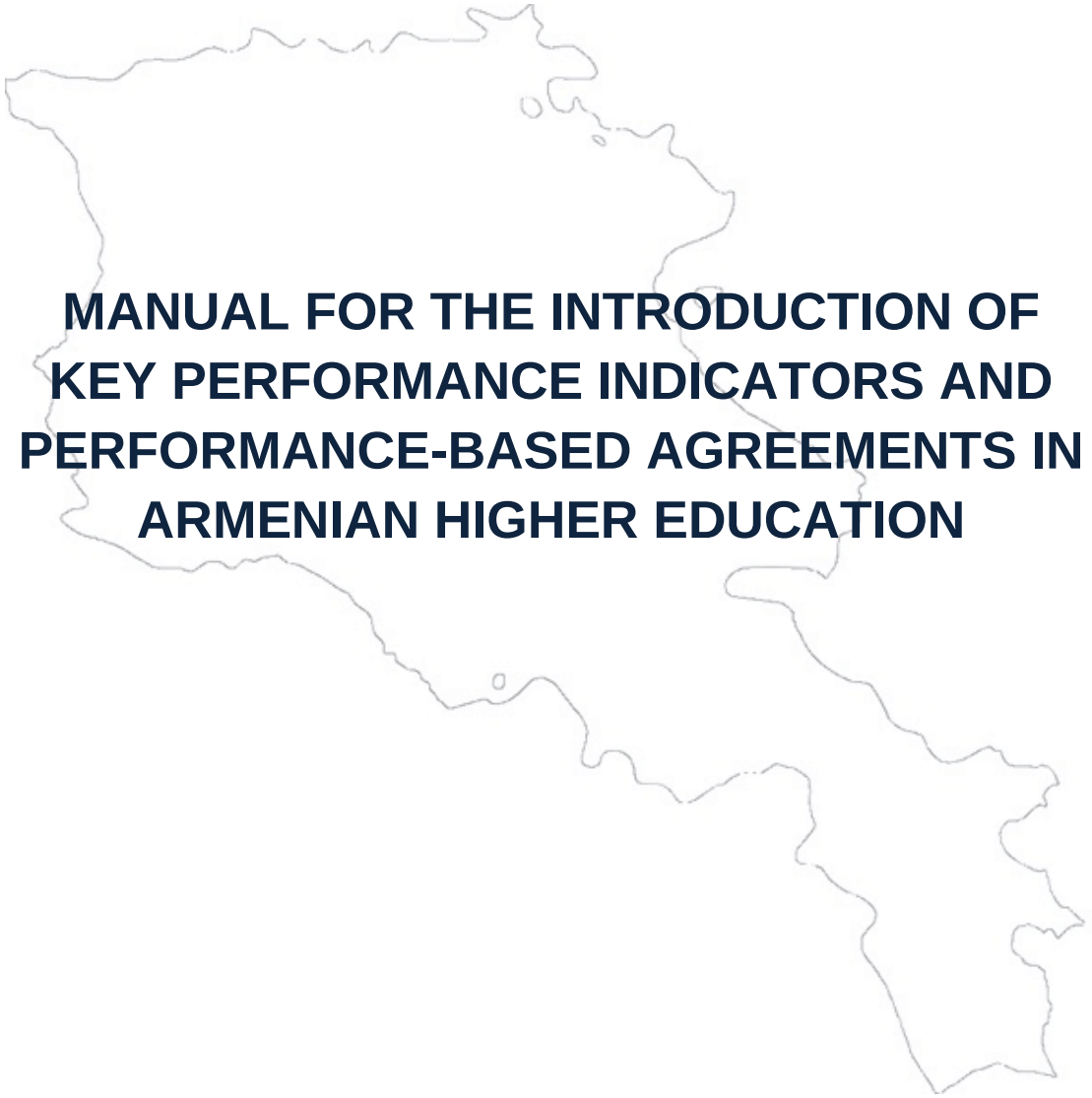

MANUAL FOR THE INTRODUCTION OF KEY PERFORMANCE INDICATORS AND PERFORMANCE-BASED AGREEMENTS IN ARMENIAN HIGHER EDUCATION

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REPUBLIC OF ARMENIA
THE MINISTRY OF EDUCATION AND SCIENCE

TABLE OF CONTENT

1. Acknowledgments

This manual has been established with the help of many stakeholders involved in the Higher Education Sector in Armenia. First and foremost, the help of the National Center for Professional Education Quality Assurance (ANQA) and its director Ruben Topchyan was crucial for guidance and input when this manual was still in its draft phase. Secondly, the rectors and vice-rectors of state and non-state institutions I have interviewed to discuss the draft version of the manual: Paruyr Kalantaryan (Yerevan State University of Economics), Larissa Avetisyan (Yerevan State Medical University), Karine Harutyunyan (Yerevan State University of Languages and Social Sciences), Gor Chatinyan (RA Public Administration Academy), Ruben Aghgashian (Polytechnic University of Armenia) and Zhora Djhangiryan (Gladzor University). Lastly, a thank you to the Ministry of Education and Science for providing technical support when this manual was being created, especially to Mr. Hovhannes Hovhannisyan, deputy-minister for Education and Sciences and Mr. Samvel Karabekyan, advisor to the Minister of Education and Science in the Ministry.

2. Background

The YES Armenia Project 'Alignment of Higher Education Institutions' Strategies with Government Policy' which was launched in December 2017 envisioned the introduction of Key Performance Indicators and performance-based Agreements between the Armenian Government and the Higher Education Institutions operating on the territory of the Republic of Armenia. With the help of the National Center for Professional Education Quality Assurance (ANQA), a benchmark study was created to look at the system of Key Performance Indicators and Performance-based Agreements in depth and look at the experience of other countries which have recently undergone changes in their Higher Education sector and who have introduced such a system.

After the benchmark study, a draft model for Armenia was created to introduce this new system in the Education sector. Based on that, a draft version of the manual was created in table form and discussed with stakeholders to ensure inclusiveness. These interviews have been held in the month of July 2018 with vice-rectors and rectors of state and non-state higher education institutions in Armenia. These interviews have been recorded and summarized (available upon request).

The next phase of the YES Armenia Project consisted of writing the manual based on the heavy research that was done in the first months of the project, the recommendations and input from the stakeholders and advice from ANQA and the Ministry of Education and Science.

This manual is the result of reading numerous articles on KPIs and PBAs, meetings with stakeholders and representatives of the YES Armenia project, but mostly the help of ANQA's director, Mr. Ruben Topchyan.

3. Introduction

The Education sector is often perceived as one of the main preconditions for a country's sustainable progress and human capital reproduction and development. That is why most countries strive to develop a national education system, which is in conformity with regional and global processes. Such a system should satisfy each and every individual as well as the society and the state at large.[1]

During the past years, a globalizing tendency of governance in Higher Education can be perceived. Concepts such as Key Performance Indicators (KPIs), Performance-based Funding and Performance-based Agreements (PBAs) have found their way to the broader sphere. We can see that governments define their relationship with higher education institutions more and more with contracts and agreements in which specific targets are defined and linked to certain merits or demerits.[2]

Many governments of different countries have undertaken reforms to optimize and better coordinate their relationship with the national higher education institutions. For example, in 2013 Finland reformed its system to better take into account the number of qualifications completed by students and their progress in their studies. Low graduation rates and the long duration of studies in higher education attracted the attention from decision-makers in Finland to try and find solutions for the weak performance of the universities. This was attempted by setting up performance-based funding schemes, which represent an attempt to encourage universities to improve their quality and performance while also helping the nation improve its economic growth.[3]

As the Armenian Development Strategy points out, Armenia's education sector is considered to be one of the preconditions for sustainable development. Improvements in this sector should therefor be one of the development priorities of Armenia, especially in the post-revolutionary state Armenia currently is in. developments should include increasing the quality and effectiveness of education at all levels, increasing the relevance of different levels of international standards and ensuring affordable and accessible education for all groups of the Armenian population. However, to successfully implement these reforms, a continuous increase in public expenditure in the education sector is vital.[4]

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[1] RA Law on Approving the RA State Programme of Education Development until 2030, "Education That We Need", 2017.

[2] Mano, M., & Lourenco, R., "Key Performance Indicators in Higher Education Institutions – Average Time of Completion a Degree", 2010, pp. 15-30.

[3] Kettunen, J., "The Performance-Based Funding Schemes of Universities" in *Management Dynamics in the Knowledge Economy*, 4, (2016), 1, pp. 109-124.

[4] Armenian Development Strategy, (09.02.2018, https://eeas.europa.eu/sites/eeas/files/armenia_development_strategy_for_2014-2025.pdf).

In Manja Klemenčič's 2016 Feasibility Study on Armenian Higher Education in Armenia, the of low level of alignment between the government and the strategies of higher education institutions is mentioned as one of the education sector's main challenges.[5]

The previous Armenian governments have undertaken several actions to point out the need for reform in the Armenian Higher education sphere. For example the 'Armenian Development Strategy 2015-2025: Key Recommendations on Higher Education' outlines the current struggles of the Armenian higher education sphere and also makes recommendations like 'improving the effectiveness of the Higher Education system', 'expand autonomy and academic freedom' and 'improve the quality of professional education and bring it in line with the demands of the labor market by promoting employment of graduates.'

A system based on Key Performance Indicators and Performance-based agreements could be a remedy for all this. Introducing such KPIs will guide the higher education institutions in Armenia in a specific desired direction, thus creating an alignment with the government's strategies. The goal of this manual is to explain the steps that have to be undertaken to introduce and implement such a system in Armenia.

This manual will have the following structure: the first section will briefly explain the concept of KPIs and PBAs (for a more in-depth reading on this matter, the benchmark study can be made available upon requested). After that, the steps that have to be undertaken by the four main players in this reform (the Armenian Government, the RA Ministry of Education and Science, the Armenian Higher Education Institutions and the National Center for Professional Education Quality Assurance) will be discussed. For example, it will contain guidelines for setting up a government strategy for Higher Education, focus points when creating KPIs and Performance-based agreements and recommendations for monitoring and evaluation.

4. Key Performance Indicators

One of the most fundamental principles of management in general is performance measurement. This measurement is important because it can identify where the current performance gaps lay between the current and the desired performance. It can also provide an indication of the progress towards closing these gaps.[6] Using carefully selected key performance indicators can precisely identify where to take action to improve the performance of a desired system, in this case the higher education sector in Armenia.

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[5] Klemenčič, M., *Feasibility Study: Towards a New Higher Education Strategy 2016-2025 of the Republic of Armenia,* 2016, 152p.

[6] Klipfolio, *What is a KPI?* (07.08.2018, https://www.klipfolio.com/resources/articles/what-is-a-key-performance-indicator).

Researchers broadly agree on four types of performance indicators: Input, Process, Output and Outcome indicators. These can also be categorized as Quantitative (Input and Output) and Qualitative (Outcome and Process) indicators.

Quantitative indicators are the indicators, which can be associated with the measurement of a quantity or an amount. These indicators are expressed as a numerical value. Input and output indicators are an example of qualitative indicators. Input Indicators reflect the human, financial and physical resources, which are involved in supporting programs, activities and services. Output Indicators reflect the quantity of outcomes produced, including immediate measurable results and direct consequences of activities implemented to produce those results.[7]

Qualitative indicators are associated with descriptions, which are based on observations, rather than an exact numerical measure or value, like Outcome and Process Indicators. Output Indicators measure complex processes and results in terms of their quality and their impact. Process Indicators look at how the system operates within its particular context accounting for institutional diversity. They provide an understanding of the current practice and the quality of that practice.[8] One way to evaluate the strength of key performance indicators is by using the SMART-criteria.

5. Performance-based Agreements

Performance-based agreements are contracts that are set up between the government and individual higher education institutions. These contracts set out specific goals that institutions have to achieve in a given time period. These goals are specified in the contracts in the form of the Key Performance Indicators, which were discussed in the previous section. The intentions to accomplish given targets are specified and are measured against preset known standards. Performance is goal- or problem-oriented, results-based and measured against pre-set standards, which are the result of a political decision or of stakeholders. Often these performance agreements are linked to funding from the government, meaning that if a higher education institution reaches the targets set in the agreement within the given timeframe, the funding for that higher education institution increases.[9]

The aims of performance agreements are to encourage institutions to strategically position themselves **(institutional profiling). I**n the Armenian

[7] Chalmers, D. (2008), *Indicators of University Teaching and Learning Quality*, 2008, 83p.

[8] Kuh, G. D., Pace, C. R., & Vesper, N., "The Development of Process indicators to estimate student gains associated with good practices in undergraduate education" in *Research in Higher Education*, 38 (1997), 4, pp. 435-454.

[9] De Boer, H., et al., *Performance-Based Funding and Performance Agreements in Fourteen Higher Education Institutions, 2015.*

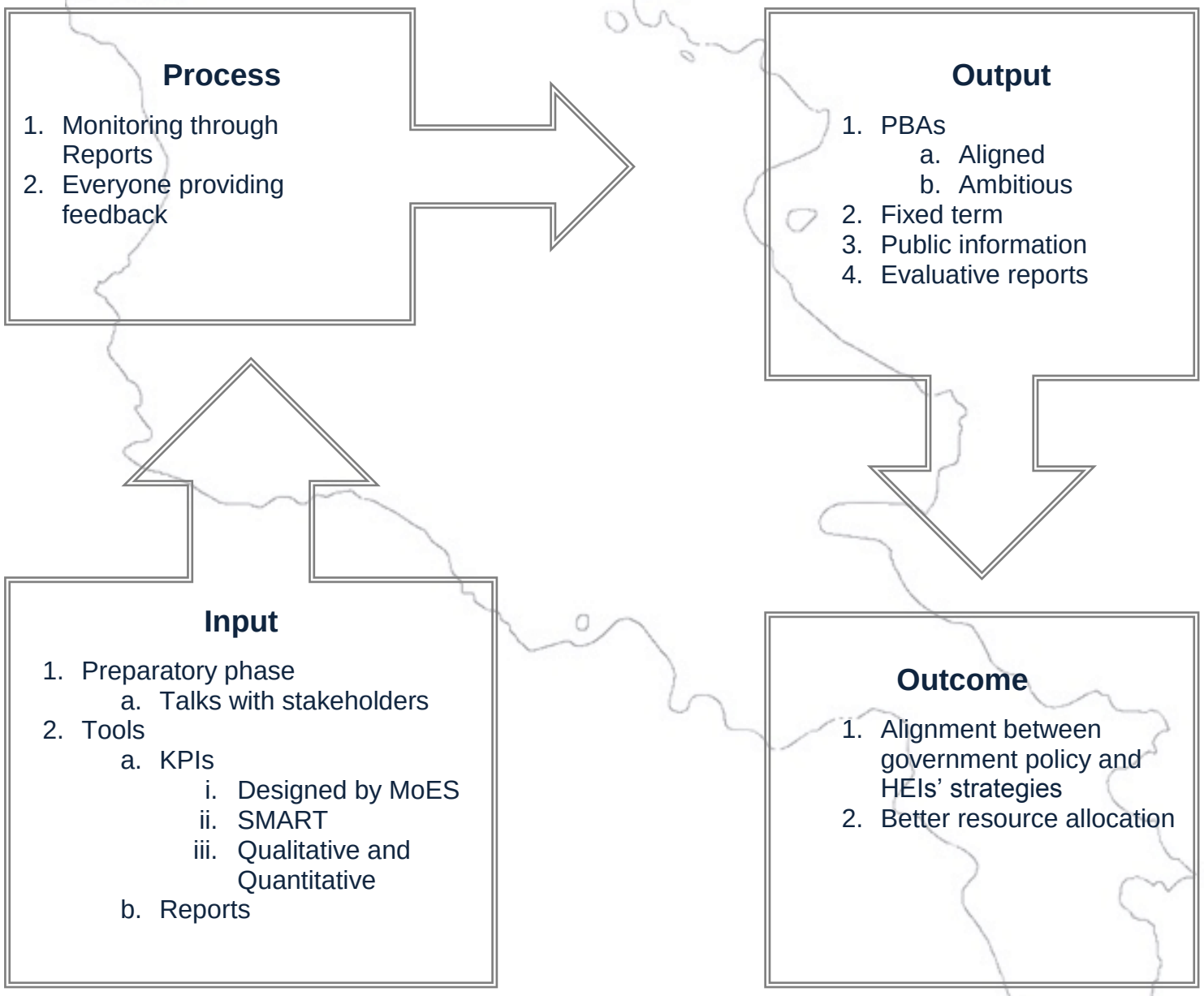
case, the specific aim is to also create more alignment between the strategies of higher education institutions and government policy concerning higher education. These agreements can also lead to the diversification of the higher education system. Another aim is to improve the efficiency of the institution's activity. For example specifying targets and indicators referring to completion rates or drop out can lead to the latter.[10]

Before parties actually start with the negotiations on performance-based agreements, the own goals should be defined first.

6. Manual

The goal of this manual to explain the steps that have to be undertaken to introduce a reform in Armenian higher education based on key performance indicators and performance-based agreements. This section will have the following structure: first of all the model for Armenia will be discussed. This model explains what kind of KPIs are favorable and who should be involved. After that, the actual manual in table form will be presented and after that discussed in depth. The steps for the main four actors (the Armenian Government, the RA Ministry of Education and Science, the Higher Education Institutions, the National Center for Professional Education Quality Assurance) are clearly defined and elaborated. The next figure shows the simplistic model for Armenia, consisting of four parts: input, process, output and outcome. These four parts are explained in what is next.

[10] De Boer, H., et al., *Performance-Based Funding and Performance Agreements in Fourteen Higher Education Institutions, 2015.*


Process
1. Monitoring through Reports
2. Everyone providing feedback
Output
1. PBAs
a. Aligned
b. Ambitious
2. Fixed term
3. Public information
4. Evaluative reports
Input
1. Preparatory phase
a. Talks with stakeholders
2. Tools
a. KPIs
i. Designed by MoES
ii. SMART
iii. Qualitative and Quantitative
b. Reports
Outcome
1. Alignment between government policy and HEIs' strategies
2. Better resource allocation

a. Model for Armenia

The way of reaching a reform in Armenian Higher Education based on KPIs and PBA consists of four main aspects: the input, the process, the output and the outcome. The input phase consists of the preparatory phase where the interviews with the stakeholders (rectors and vice-rectors of Armenian state and non-state universities) have been held to gather information on their opinion concerning the introduction of KPIs and PBAs in the Armenian Higher Educations sector. Since these stakeholders will be the ones who actually have to work with these new tools, it was important to include them in the preparatory phase. This reform envisions being a combination of a top-down and bottom-up approach to make sure everyone who is involved is satisfied with the outcome of this project. The tools for this reform are the KPIs and the reports. As will become clear in this manual, the Ministry of Education and Science, based on the government's strategy concerning Higher Education, will design the KPIs. This means the MoES will have to base the indicators on the government's strategy and discuss this with the representatives of the higher education institutions to understand the probability of reaching them. These KPIs will have to correspond to the SMART-criteria and they have to be a combination of both qualitative and quantitative indicators (this will become more clear in the section 'Part for the Ministry of Education and Science). Another tool for this reform are the reports. This reform envisions yearly progress reports submitted by the higher education institutions to show the results of their efforts. Without these reports, this reform will fail since it will not provide the necessary information for the MoES to monitor the progress.

These reports are part of the entire process of this reform. They allow monitoring and ensure transparency. The use of Key Performance indicators only works if they can be rewarded or sanctioned. In order for that to happen, reports are necessary to show progresses, stagnation or worsening of some cases. This will also allow for feedback. When the Higher Education Institutions submit their reports, they can provide feedback on the KPIs. On the other hand, the MoES and ANQA will be able to provide feedback to the Higher Education Institutions based on the reports they have submitted. It allows for a constant collaboration between all parties to ensure that everyone is aware of the changes that have been happening due to the introduction of key performance indicators and performance-based agreements.

All of this leads to the use of Performance-based agreements to define the relationship between the government and the higher education institutions in Armenia. These performance-based agreements have to correspond to two characteristics: they have to strive for alignment and they have to be ambitious. This means that the agreements will only be concluded if the KPIs mentioned in the agreements will lead to an alignment between the strategies of the higher education institutions and the national strategy concerning

higher education. The agreements also have to be ambitious, ensuring that they are more than just a piece of paper. The parties to the agreements have to be motivated enough to reach the goals in the agreements, especially because the agreements are going to be fixed-term so they will have to operate within a given timeframe. The use of these agreements will also ensure transparency, like with the reporting. Both the MoES and the broader public will be able to consult the progress reports since they will be made publically available for consultation. This will enhance the competition between the higher education institutions, which is beneficial for the society in its whole. When the higher education institutions read the progress reports of the other institutions, they can compare their situation or status quo and strive to do better. This will lead to better performing institutions. Since this information is made publically available, students can also consult it when making a decision about their enrollment in tertiary education since it will indirectly provide a ranking of the higher education institutions based on performance in line with the country's strategies concerning higher education. At the end of the term of the agreement, evaluative reports will give an overall look on the performance of each higher education institution. These evaluative reports will be written by independents to avoid conflicts of interests. They will be objective reports, reporting on the progress of the individual institution during the period of the agreement.

The outcome will be an alignment between the strategies of the higher education institutions and the overall national strategy concerning higher education of the Armenian government. This will lead to a better performing higher education sector and is beneficial for the society on its whole since the education will provide education in line with certain goals set on a national level.

These KPIs and PBAs agreements need incentives to work and demerits to sanction. When the higher education institutions are capable of showing real progress on the indicators, which are selected by the Ministry of Education and Science. This project envisions a significant increase in the budget of the Ministry of Education and Science to be allocated to the higher education institutions. In Armenia, approximately 9% of the funding of higher education institutions is public. This is a low number compared to other countries, like Finland or Ireland. Using Key Performance Indicators and Performance-based Agreements will allow the higher education institutions to 'earn' more funding since these Key Performance Indicators and Performance-based agreements will be linked to funding. When a higher education institution reaches the goals in the agreement within the agreed timeframe, it will receive additional funding. This funding will be distributed in bulk and the higher education institutions will be free to decide how or on what they will spend it. On the other hand, when the higher education institutions fail to live up to the arrangements set in the agreement, they will be sanctioned. Sanctions can consist of loss of accreditation or firings in the

managements and changes in the rectorate. This will lead to a better resource allocation in the field of higher education in Armenia.

Based on all of this, a manual with concrete steps has been created (see next section). This manual explains all the steps for the main actors of this reform: the RA Government, the RA Ministry of Education and Science, the Higher Education Institutions and the National Center for Professional Education Quality Assurance (ANQA). The steps of this manual are presented in table form and later on explained in detail. Annexes are used to give examples of certain steps of the manual.

For the MoES	For the Government	For the HEIs	For ANQA
- Develops strategy for higher education - Meeting with HEIs to discuss the strategy and public consultation round - Publishes strategy - Finalizing and sending strategy to government - Requesting data from HEIs according to priorities - Creation of KPIs and discussing with HEIs - Sending KPIs to government for creation PBAs - Overseeing the PBA	- Waiting for creation of KPIs - Signing the PBAs based on KPIs by MoES - Executing PBAs	- Meeting with MoES to talk about priorities and give opinion on strategy - HEIs and MoES agree on strategy priorities - HEIs deliver requested data to MoES - HEIs can give opinion on KPIs - Agreeing on KPIs by all parties - Signing PBA with government - Executing PBA - Annual reports to show progress	- Gives opinion on own strategies of MoES - ANQA takes up operator role during the creation of KPIS - ANQA monitors PBAs through evaluation reports

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As mentioned before, this manual consists of four main parts: one for the Armenian government, one for the Ministry of Education and Science, one for the Higher Education Institutions and one for the National Center for Professional Education Quality Assurance. The previous table gives an overview of these steps. In the next part, all of these steps will be explained in depth for each party that is going to contribute in this reform where key performance indicators and performance-based agreements will be introduced in Armenian higher education.

a. Part for the RA Ministry of Education and Science

1. Develops strategy for higher education

The first step for this reform to succeed is to have a clear national strategy for the country, with a part that specifically focuses on education and higher education. The RA Ministry of Education and Science must clearly define the priorities for the countries for a given time period, taking into account the national issues and the global changes that have been taken place or are taking place around the world.

The changing nature of higher education demands a proactive, inclusive and collaborative strategic development process. Before a strategy for higher education is developed, a broad collection of research and stakeholder data is needed. Trends in higher education should also be analyzed in the context of an individual school's performance, aspirations and mission statement.

It is important for individual higher education institutions to have a long-term strategic plan that is sustainable over time, yet flexible enough to adapt to both internal and external challenges and trends. During the meetings with the rectors and vice-rectors, it became clear that most of the higher education institutions in Armenia have a strategic plan, mostly for a period of four or five years.

Developing a national strategy for higher education is therefore a task for the Ministry Education and Science and they should define their own guidelines on how to develop such a strategy.

2. Meeting with HEIs to discuss the strategy and public consultation period

After developing a strategy, the Ministry of Education and Science should meet with the Higher Education Institutions in Armenia to discuss this draft version of the strategy. It is very important to include these stakeholders in this process because they will be the ones who are going to be responsible for executing this strategy. The higher education institutions will be the actors who are going to have to change their activities according to this strategy.

This manual suggests holding meetings with the rectors and vice-rectors of all the higher education institutions operating on the territory of the Republic of Armenia. It is very important that the rectors as well, and not only the vice-rectors are present since this will be a high level meeting where the representatives of the Ministry will present this strategy. The researchers will also be given a role in these meetings to elaborate on the different aspects of the strategy and back everything up with data and sources.

As mentioned before, these meetings have to be held with all the higher education institutions, public and private, and thus the universities, academies, conservatories and institutes. This manual suggests holding the meetings according to the classification that already exists, meaning that the rectors and vice-rectors of all the universities assemble on one day, the rectors and vice-rectors of the academies assemble on another day and so on. During a first meeting, the strategy will be presented in broad terms and explained using the research that has been conducted. The participants can give their opinion and/or voice their concerns. The participants will also have the opportunity to send their remarks electronically until one week after the meeting has taken place (to give them time to absorb everything and think about it in a different setting). The Ministry will take into account these opinions and concerns and will organize another meeting after a certain period of time, preferably within three weeks. The Ministry will use the remarks and update the draft of the strategy, which will be presented to the representatives of the Higher education Institutions one last time. This ensures a top-down and bottom-up approach where one of the main stakeholders are heavily involved in the finalization of the country's national strategy concerning higher education.

In parallel to this consultation round, there is a public consultation round. This means that while the representatives of the higher education institutions are thinking about remarks on the national strategy, the Armenian public is doing the same. It is also expected that the National Center for Professional Education Quality Assurance makes recommendations or remarks, following the same procedure.

The ministry makes its draft version of the strategy available on its website and the Minister of Education and Science, Mr. Arayik Harutyunyan will have a short appearance on national television to present the draft version of the strategy. He will mention the fact that the draft strategy is available on the website and that interested citizens, organizations, employers in the labor market etc. can send in amendments to the text and voice their opinion. The consultation period will be three weeks, starting from the day of the interview. There will be a new electronic email address where the people can send their recommendations. The Ministry will process these amendments and select the ones that are useful or serious and update the national strategy.

These two consultation rounds lead to a national strategy that has been discussed with the representatives of the higher education institutions and the interested public. A top-down + bottom-up approach is thus ensured.

3. Publishes strategy

After the consultation rounds with the representatives of the higher education institutions and the public consultation of the public, the Ministry of Education and Science will publish the final version of the strategy on its website. The Minister will have a last appearance on national television to present the finalized version.

4. Finalizing and sending strategy to government

After all these previous steps, the Ministry of Education and Science symbolically sends the National Strategy for Higher Education to the Armenian Government. This then becomes the government policy on higher education and will be used for the alignment with strategies of the higher education institutions.

5. Requesting data from HEIs according to priorities

As mentioned before, the goal of the Key Performance Indicators is to create an alignment between the policy of the government (the National Strategy for Higher Education as developed by the Ministry of Education and Science and as discussed with the main stakeholders) and the strategies of the higher education institutions.

Now that the National Strategy is ready and approved, the Ministry of Education and Science has to start creating the Key Performance Indicators. Therefore it is necessary that the higher education institutions present the necessary data in order for the Ministry to create the correct Key Performance Indicators for each higher education institution. The Key Performance Indicators will be the same for all of the higher education institutions, which are taking part in this system. However, the sub-Key Performance Indicators may differ because not all of the higher education institutions are on the same level. For example: there is a Key Performance Indicator '*Enhancing Internationalization in Armenian Higher Education.*' This Key Performance Indicator is applicable to all of the Higher education institutions. However, there are also sub-Key Performance Indicators for all of the higher education institutions but the numbers and percentages may differ. If University X has already made significant efforts to enhance the number of incoming international students, the sub-Key Performance Indicator *'Enhancing the number of incoming international students'* may differ from the same sub-Key

Performance Indicator for University Y who has no or little experience with incoming international students.

Therefore the higher education institutions must present their data to the Ministry of Education and Science in order for the Ministry to be able to create corresponding sub-key performance indicators for each higher education institution.

6. Creation of KPIs and discussing with HEIs

Based on the national strategy for higher education and the data presented by the higher education institutions, the Ministry of Education and Science will be responsible for the creation of these indicators. Taking into account the current human resources of the Ministry, there is a possibility that the Ministry will not have the capacity to create these KPIs. Therefore, this manual suggests attracting experts (both national and international) to sit together and discuss about the sub-performance indicators. There should not be major discussions on the main Key Performance Indicators since they result from the national strategy. However, the sub-key performance indicators have to be discussed in detail. ANQA will take up the role of operator and will lead the negotiations and talks about KPIs in the Ministry. This means that ANQA will be responsible for organizing and leading the meetings that take place.

Creating a team that has national or international experience, will give more strength to the Key performance indicators and will make it easier for the Ministry of Education and Science to create these Key performance indicators in a relatively short period of time. This team should consist of representatives from the higher education institutions, from student organizations, international organizations focusing on education (World Bank Armenia Office, UNICEF, EU), employers from the labor market, NGOs and so on. It is important to attract a broad variety of experts to get different perspectives and insights.

This team will be given enough time to discuss those sub-key performance indicators and adjust them for the specific higher education institutions. This will lead to a list of sub-key performance indicators that the higher education institutions have to follow.

As mentioned before, it is advised to use both qualitative and quantitative key performance indicators, which are corresponding to the SMART-criteria.

There are certain questions to be asked when defining key performance indicators. [11] These will be presented with the example of the Key Performance Indicator 'Internationalization':

- What is the outcome you desire?
  - The outcome we desire can be *an increase in incoming international students to a specific Armenian higher education institution.*
- Why does this outcome matter?
  - This outcome can be important given the international trend of globalization and knowledge transfer. Tourism can also benefit from this.
- How can this progress be measured?
  - The progress can be measured by looking at the progress reports of the specific higher education institution that is trying to reach the sub-key performance indicator. When they present their progress, it will be clear if they have had more incoming international students over a certain given time period.
- How can this outcome be influenced?
  - This outcome can be influenced by creating international dormitories or setting up a campaign to promote Armenia as a interesting destination for an educational exchange
- Who is responsible for the outcome?
  - In this case, the management of the higher education institution will be responsible for creating an environment, which is appealing to international students.
- How will you know that you have achieved the desired outcome?
  - This will also be seen in the progress report. If the specific higher education institution has had more incoming international students, it is clear that the desired outcome has been achieved.
- How often will you review the progress towards the outcome?
  - In this case, the annual report will allow for monitoring every year. At the end of each academic year, we will be able to see how many students have been coming in, compared to the year before.

To also ensure a top-down + bottom-up approach in this phase, the representatives of higher education institutions (preferably again the rectors and vice-rectors) will be invited to discuss the probability of reaching those

[11] Klipfolio, *What is a KPI?* (07.08.2018, https://www.klipfolio.com/resources/articles/what-is-a-key-performance-indicator).

key performance indicators. These meetings have to be held individually with each higher education and not in an entire session, since the sub-key performance indicators are institution-specific. The results of these meetings will be taken into account and a last review will take place to modify the existing sub-key performance indicators for the individual higher education institutions. This will lead to a final version of sub-key performance indicators per higher education institution in Armenia. The next step is sending them to the government.

7. Sending KPIs to government for creation of PBAs

When the Key performance indicators (and sub key performance indicators) are ready, the Ministry of Education and Science will send them to the RA Government in order for them to include them in the performance-based agreements. These performance-based agreements will be signed between the government and the specific higher education institution. A template of a performance-based agreement can be found in the annexes of this manual (Annex 1).

8. Overseeing the PBA

When the performance-based agreement is signed between both parties, the Ministry of Education and Science will have to oversee them. They will do this by analyzing the annual reports by the higher education institutions. The progress reports will have to be submitted at the end of each academic year. They will be made available on the website of the Ministry of Education and Science. These progress reports will show if the higher education institution at stake is making enough efforts to reach the key performance indicators and its sub indicators. If this is not the case in the second year of the agreement, a warning will be sent to the higher education institution and negotiations will take place with the Ministry to discuss the reason behind the lacking of the higher education institution. If force major is the reason behind it, the ministry can propose a new sub-key performance indicator that may be easier to reach for the higher education institution. If force major is not a reason and it is simply a result of not enough effort, the Ministry will use a less soft approach and demand progress on the specific sub-key performance indicator by requesting a report each semester, instead of annually.

b. Part for the Armenian Government

1. Waiting for creation of KPIs

The Armenian Government receives the National Strategy for Higher Education from the Ministry of Education and Science and adds it to the

overall National Strategy for the Republic of Armenia. The government now has to wait for the Ministry to create the KPIs.

2. Signing the PBAs based on KPIs by MoES

When the Ministry of Education and Science creates and finalizes the Key Performance Indicators, they send it to the RA Government. The Government is then responsible for drafting the performance-based agreements between the individual higher education institutions. A template of a performance-based agreement is added in annex to this manual. It is important that these agreements have two characteristics: they have to be ambitious and they have to create alignment between the government's policy and the strategies of the higher education institutions. The performance-based agreement must have a fix term. A term of four years is recommended and suggested. The agreements must also mention all the Key Performance Indicators that will lead to alignment with the government's policy (which is here the National Strategy for Higher Education published by the Ministry of Education and Science). Besides mentioning the Key Performance Indicators, the specific tasks that have to be carried out by the higher education institution should also be mentioned and specific comments can also be included.

3. Executing PBAs

By signing the agreement, both parties agree to live up to the agreement and follow through. From the side of the higher education institution, this means making an effort to reach the key performance indicators mentioned in the agreement. The higher education institutions also agree to show their progress in the form of annual progress reports. From the side of the government, this means that they have to provide funding for the higher education institution in case of successfully reaching the key performance indicators mentioned in the agreement.

c. Part for the Higher Education Institutions

1. Meeting with MoES to talk about priorities and give opinion on strategy

As mentioned in the part for the Ministry of Education and Science, the representatives of the higher education institutions (rectors and vice-rectors) will be invited for a meeting at the Ministry to discuss the draft version of the national strategy on higher education in Armenia. During the meeting, the Minister for Education and Science will present the draft version of the strategy. The research team that has conducted the research will also present their findings and back up the strategy with facts and data. The representatives of the higher education institutions will have the chance to

voice their opinion or concerns regarding the strategy during the meeting. They also have three weeks until after the meeting to send more remarks or recommendations. This consultation period of three weeks is given to these stakeholders in order for them to absorb the information in the strategy and think about it privately. After this consultation period, the representatives will be invited over to the ministry one last time. By that time, the ministry has already incorporated all the necessary and useful remarks in the strategy. It is important to keep in mind that in parallel with this consultation of the representatives of the higher education institutions, there is also a consultation period for the public. The final version of the strategy will contain useful remarks from all the stakeholders that were consulted in this consultation period.

2. HEIs and MoES agree on strategy priorities

As mentioned in the previous step, the higher education institutions and the Ministry agree on the strategic priorities for Armenian higher education through a meeting and a consultation period of three weeks.

3. HEIs deliver requested data to MoES

Based on the approved national strategy for higher education, the higher education institutions will have to deliver data to the Ministry in order for the ministry to create the Key performance indicators. The type of data that is needed will depend on the sub key performance indicators the ministry agrees on, together wit the team that is responsible for the creation of these key performance indicators.

4. HEIs can give opinion on KPIs

When the Ministry and team agrees on the specific sub key performance indicators, the higher education institutions will be invited over for individual meetings to discuss the probability of reaching those goals. This allows one again for a top-down and bottom-up approach when introducing this system in the Armenian higher education sector. During these discussions, the higher education institutions will be able to tell the ministry if they have the resources (both human and financial) to reach the goals. If they do not deem it possible to work with a specific sub key performance indicator, the Ministry takes this into account and changes the sub performance indicator accordingly.

5. Agreeing on KPIs by all parties

When the higher education institutions have discussed the sub key performance indicators with the ministry, they have to all reach a mutual agreement. This leads to the accepting of the key performance indicators and sub performance indicators by both parties.

6. Signing PBA with government

After agreeing on all the key performance indicators, the individual higher education institutions will be invited by the RA Government to sign the performance-based agreement.

7. Executing PBA

After signing the performance-based agreement, the higher education institutions will be responsible for executing the agreement. This means living up to the agreement and making efforts to realize progress. This progress is shown in annual reports.

8. Annual report to show progress

The higher education institutions will be entitled to show their progress on the key performance indicators by submitting annual progress reports (at the end of each academic year). The performance-based agreements have a fixed term of four years. This means that each higher education has to submit at least four progress reports. As mentioned in step 8 in the part of the Ministry of Education and Science, it is possible that an individual higher education institution is sanctioned and has to submit two reports per year (per semester).

These reports have to be sent to the Ministry of Education and Science at the end of each semester.

d. Part for the National Center for Professional Education Quality Assurance

The National Center for Professional Education Quality Assurance will be available for support throughout the entire process of implementing this system based on key performance indicators and performance-based agreements in Armenia. Given the ten-year-old experience ANQA has with working with the different state and non-state higher education institutions, ANQA can be a very good meditative partner in this reform. In this reform, there are broadly three steps for ANQA.

1. Gives opinion on own strategies of MoES

When the Ministry of Education and Science publishes its draft version of the national strategy for higher education, ANQA will also be able to give their opinion and make recommendations to the ministry. ANQA has a good understanding of the higher education sector through the experience of granting accreditation to accredited higher education institutions. Therefore, the opinion of ANQA can be valuable to the Ministry. ANQA can mention certain nuances other actors may have overlooked. ANQA will also have three weeks to send in recommendations or remarks, in parallel with the public consultation period. They can send the recommendations to the email address that will be created (as mentioned above).

2. Taking up role of operator during the creation of KPIs

When all parties have adopted the national strategy for higher education, ANQA will take up the role of operator to lead the negotiations for the creation of KPIs. As mentioned in 'the part for the Ministry of Education and Science', ANQA will be responsible for the organization of the meetings and other aspects, like technical assistance. Given ANQA's experience of talking with different stakeholders and higher education institutions representatives during the accreditation procedures, it is suited that ANQA takes this operator role to steer everything in the right direction.

3. ANQA monitors through evaluation reports

As mentioned before, the higher education institutions must submit yearly progress reports to show their progress on the areas the sub key performance indicators. Since these progress reports will be made publically available or consultation, ANQA will also have access to them. At the end of the term of the agreement, ANQA will write an evaluative report on all the performance-based agreements with conclusions about the progress and recommendations. In the next section, this manual will discuss possible sanctions and rewards. Since 'the loss of the accreditation' is one of the possible sanctions and since ANQA is giving out these accreditations, it is important to include ANQ in this evaluative phase.

7. Rewards and sanctions linked to the agreements

In many countries, funding for higher education institutions is linked to the performance-based agreements. That means that the institutions get a portion of the funding if they reach the indicators mentioned in the performance-based agreements. This is a motivational aspect since public funding in

Armenia represents a very small portion of the entire funding of the higher education institutions. Using this financial incentive is one example of a reward that can be linked to this system.

When higher education institutions do not reach the indicators or do not show sufficient efforts to reach them, there will be sanctions. As mentioned in this manual, when higher education institutions are slacking, they will be subject to stricter reporting where they have to submit progress reports each semester.

8. Annexes

a. Annex 1: Template of a Performance-based Agreement

NAME OF HIGHER EDUCATION INSTITUTION

Performance-based Agreement with the Government of the Armenian Republic

Background

- This performance-based agreement is for the period xx/xx/xxxx – xx/xx/xxxx
- The aim of the agreement is:
  - To encourage the higher education institution to follow the key performance indicators which are resulting from the Armenian National Strategy for Higher Education
  - To define the relationship between the RA Government and the higher education institution
- …
  - …
- …

KPIs and sub-KPIs	Tasks	Comments
Xxx	Xxx Xxx xxx	Xxx
Xxx	Xxx Xxx xxx	Xxx
…	…	…

Responsibilities of the Higher Education Institution

The RA Government and the Higher Education Institution enter into this Performance-based Agreement upon the understanding that the Higher Education Institution will provide the Ministry of Education and Science with the necessary information in the form of annual progress reports for the duration of the agreement to show the progress in reaching the Key Performance Indicators mentioned in this agreement.

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xxxxxxxx, RA Prime Minister xxxxxxxxxx, Rector

Name of the RA Prime Minister Name of the HEI

Date: xx/xx/x

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