R&I-LINKS 2-UA

Monitoring Concept for preparing the "Monitoring report: Implementation of the PSF recommendations"

1. Introduction

This monitoring concept (D1.7) builds upon the recommendations prepared by the Policy mix review group done over the EC Policy Support Facility (PSF) and its main objective is to provide a roadmap for this exercise. Beneath the methodological basis for the latter monitoring report, herewith the identification of the main actors and specific stakeholders for the implementation processes in Ukraine, distinct working steps and an appropriate timeframe will be determined. The final monitoring report (D1.8)¹ will give an assessment on the practical implementation of the recommendations made by the Policy mix review group in the context of the EC PSF for Ukraine.

2. Responsibilities

A monitoring group was established in the frame of the RI-LINKS2UA project (DLR, ZSI, MESU) to prepare this monitoring concept. DLR is the task leader for this activity (T1.4) and lead partner to develop the present deliverable. Moreover, this monitoring group will monitor the implementation of the recommendations until the end of the project duration, in order to incorporate the evidence gained into the already mentioned final monitoring report.

¹ Final Monitoring Report on the implementation of the policy mix peer review recommendations (D1.8)

3. Framework conditions

With regard to the precarious economic and political situation in Ukraine the total budget for S&T decreased from 1.028 billion Euro in 2012 to 0.49 billion Euro in 2016 with a negative tendency. Relative to the BIP this tendency is also visible: 0.75% in 2012 to 0.58% in 2016.² With regard to the distribution of resources an enormous concurrence is evident and MESU is under pressure to enforce a very strict prioritisation of activities which should reflect the socio-economic demands of Ukrainian society. At the same time it is necessary to ensure a strong commitment of the main actors of the Ukrainian STI-System for that prioritisation. Therefore lengthy discussions and extensive negotiations are preassigned before decisions can be made and carried by all stakeholders.

4. Objectives and Methods

The general purpose of policy monitoring and evaluation is to conduct an evaluation against success criteria initially set in this monitoring concept.³ Based on this approach, the present monitoring concept introduces the methodological tools with which the monitoring mechanism shall be operated and elaborates on the strategic purpose which is supposed to serve. In our understanding a monitoring mechanism goes far beyond a strict "observation-intervention logic", but also involves the active participation and regular information of all stakeholders concerned over the whole duration of the policy implementation process. Therefore the working group involves representatives from MESU and NASU from the beginning on.

To capture and follow the expected changes effected by the policy-related PSF- recommendations, appropriate result indicators must be chosen.⁴ Only by using appropriate indicators, expected (anticipated) and unintended (non-anticipated) changes or processes of changes can be measured effectively.

The above mentioned framework conditions is for the concept for monitoring the implementation of recommendations crucial. Recommendation No.1 aims on the strong mandate of the newly established National Council of Ukraine on Science and Technology Development (NCUST), which will be the most important strategic entity in the reformed STI-System of Ukraine. The implementation of this Council and its provision with a strong mandate will be substantial for the success of nearly all following 29 recommendations. This kind of hierarchy of recommendations and interrelation between recommendations is obvious and therefore it is not worthwhile to assess each single recommendation with "measurable criteria" without recognition of the overall framework. The typos of the PSF-recommendations are the reason why measurable quantitative

² Statistical Yearbook "Scientific and Technological Activities in Ukraine 2015". Department for Statistics in Ukraine, Kiew, 2016

Annual Report 2016, Governmental Service for IPR Ukraine (http://www.ukrstat.gov.ua/)

³ Tsoukias et al. (2013): Policy analytics: an agenda for research and practice. EURO J Decis Process (2013) 1:115–134, DOI 10.1007/s40070-013-0008-3

⁴ Gianelle, Kleibrink, 13/2015, p.1

indicators often are not practicable and qualitative criteria have to be considered. Once, when measures are implemented and new procedures are running for a while and show results it might be possible to use quantitative criteria to evaluate the success of activities.

For example the recommendation No. 12 says that "NASU and universities should promote publications in international journals and downsize in-house publishing". A potential measure could be to establish respective incentives or to provide centralised translation-services in research institutions or universities. With setting up those measures the recommendation would have been implemented but it would need much more time to evaluate that measure by the comparison of numbers of publications in international journals because articles have to be written, submitted, reviewed and published and that could need several months. Therefore, at this juncture, we are seriously able to identify newly implemented measures and to decide if they meet the intention of the PSF-recommendations. At this stage is not possible to evaluate the success of recently established activities.

If the cabinet of ministers enact a road map for distinct implementation processes for already prioritised measures, our working group would be able to track those processes and to point out where support from European side could be helpful. Until end of June 2017 MESU established a working group to develop an operational plan for distinct measures to reform the Science System of Ukraine but unfortunately up to now no legally binding decision has been taken by the Cabinet of Ministers of Ukraine.

The main goal of this exercise is not to control the Ukrainian stakeholders in implementing recommendations but to identify barriers and challenges to create options on how to meet them. It is the country's responsibility to ensure the follow-up to the Peer Review as well as to decide about the extent of implementation of its recommendations and about concrete measures.

5. Monitoring Concept

The PSF Panel advises MESU to publish an action plan [including time schedule] for the implementation of the Law on Scientific and Technical Activity in the first quarter of 2017. In this action plan the core messages and recommendations of the PSF Panel should be taken into account. End of June 2017 this action plan was still missing, which does not ease the creation of a workflow for task 1.4.

In a **first step** the working group will identify actions with regard to the PSF-recommendations (see Annex 1). Key question will be: Which activities cover the extent and nature of which recommendation presented in the PMR review. This step involves a review of the announced "Action Plan for Implementation of the Law on Science and Technology Activities", an analysis of current plans and priority settings (e.g. by MESU and NASU) and if available internal management letters and targeted interviews as appropriate.

In a **second step** all identified measures will be allocated to distinct PSF-recommendations (multiple mention are possible) and finally the status of the implementation will be assessed in three principle categories.

Category	Explanation				
Adequate implementation	The action taken met the intent of the recommendation, and sufficient evidence was provided to demonstrate action taken.				
Partial implementation	 This category encompasses three considerations: Action taken was less extensive than recommended by the PSF. Action either fell short of the intent of the recommendation, or only addressed some of the identified tasks. The entity may have established a process or procedure to address an issue, however, the specific action noted in the recommendation was not complete at the time of the monitoring. The entity may have commenced action to address a recommendation but subsequent policy changes may influence how it might be implemented. 				
Not adequate implementation	 This category encompasses two considerations: There is no supporting evidence that action has been undertaken. The action taken does not address the recommendation. 				

Table 1: principal status of implementation

It could be necessary to adopt the first draft of principle categorisation during the exercise to meet the character of all identified measures.

The **third step** will be the analysis⁵ of the identified implementation processes. This analysis will summarize the status of the implementation of PSF-recommendations and focus on how to

⁵ Final Monitoring Report on the implementation of the policy mix peer review recommendations (D1.8)

accelerate implementation processes, how to ensure efficiency, how to overcome barriers and how to provide practical support from European side.

For the presentation of the outcome an additional expert meeting with stakeholders in the first half of 2018 would be very helpful to discuss supporting options, to adopt resulted proposals to concrete demands and to provide a forum for wider discussions on STI system reformation trends to better address economic and social needs of Ukraine. Because such an activity is not foreseen in the Description of Action the project management team should discuss at the next management meeting if and how the results could be discussed appropriate.

The target group will be comprised by stakeholders from various departments of MESU, NASU and Ukrainian Universities as well as from the European Commission, experts from European countries or Eastern Partnership Countries with comparable environments. The workshop will be held in the beginning of 2018 in Kyiv, Brussels or Bonn.

Annex 1: MONITORING THE IMPLEMENTATION OF PSF-RECOMMENDATIONS

No	Area for Recommendations	Recommendations	Measures	Executive / responsible Organisation	Dead- line	Implementation Category
1.	RECOMMENDATIONS TO RAISE QUALITY AND RELEVANCE OF THE SCIENCE BASE					
1.1.	Promoting change and reform through a strong mandate of the National Board on the Development of S&T	No. 1: The National Board on the Development of S&T should work strategically in reforming and re-orienting the system of S&T in Ukraine on the basis of jointly defined priorities with all involved stakeholders, such as the Ministry of Education and Science, the future National Research Foundation and the National Academy of Sciences.				
1.2.	Raising quality and relevance of S&T through competitive research funding	No. 2: The National Research Foundation should become a strong change-maker and champion reforms in the STI system of Ukraine, notably through a stepwise strong increase in the competitive funding of research projects				
1.2.	Raising quality and relevance of S&T through competitive research funding	No. 3: The National Research Foundation should be internationally supervised and assisted to guarantee higher accountability and transparency				
1.2.	Raising quality and relevance of S&T through competitive research funding	No. 4: An international peer review system for projects should be introduced to support the excellence and internalisation of Ukrainian science				

No	Area for Recommendations	Recommendations	Measures	Executive / responsible Organisation	Dead- line	Implementation Category
1.3.	Enhancing R&D at Universities and Increasing Autonomy	No. 5: Research universities should be identified in a post-factum approach over five years on the basis of transparent international standards				
1.3.	Enhancing R&D at Universities and Increasing Autonomy	No. 6: A process of profiling and merging of universities should be induced to avoid "mushrooming" and improve impact and critical mass				
1.3.	Enhancing R&D at Universities and Increasing Autonomy	No. 7: All research organisations of the Academies of Science and universities should be entitled to their own discretionary use of acquired third party funding				
1.4.	Raising the efficiency and the contribution of the Academy of Science of Ukraine	No. 8: The National Academy of Sciences of Ukraine should streamline its current profile and concentrate its priority focus				
1.4.	Raising the efficiency and the contribution of the Academy of Science of Ukraine	No. 9: The Academy of Science of Ukraine should make its institutes' organisation more effective through regular independent evaluation exercises				
1.4.	Raising the efficiency and the contribution of the Academy of Science of Ukraine	No. 10: The Academy of Sciences of Ukraine is advised to initiate several science communication activities				
1.4.	Raising the efficiency and the contribution of the Academy of Science of Ukraine	No. 11: The Academy of Sciences of Ukraine should broaden the diversity of its Human Capital, with particular focus on age and gender balance				
1.4.	Raising the efficiency and the contribution of the Academy of Science of Ukraine	No. 12: The Academy of Sciences of Ukraine and universities should promote publications in international journals and downsize in-house publishing				

No	Area for Recommendations	Recommendations	Measures	Executive / responsible Organisation	Dead- line	Implementation Category
1.5.	Raising the efficiency of other research performing organisations through institutional reforms	No. 13: The Sectoral Academies of Science should be modernised drawing on the transformation model of the National Academy of Science of Ukraine				
1.5.	Raising the efficiency of other research performing organisations through institutional reforms	No. 14: The institutes in the sphere of MESU and other ministries should be evaluated and – depending on the obtained results of these assessments – restructured or dissolved				
1.6.	Developing talent and capacity	No. 15: Research careers should be stimulated through a mix of policy instruments, such as increase in salaries, exchange programmes or awards				
1.6.	Developing talent and capacity	No. 16: Research administration should become leaner, ensure less red tape and get rid of inefficiencies and corruption				
2	RECOMMENDATION TO OPEN UP THE RESEARCH AND INNOVATION SYSTEM TO THE WORLD AND TO ENHANCE INTERNATIONAL COLLABORATION					
2.1.	Increasing participation in European research	No. 17: The opportunities offered by Horizon 2020 should be reaped through adequate accompanying support measures and initiatives				
2.1.	Increasing participation in European research	No. 18: Ukraine should become a member of COST and provide incentives for increased participation of its STI community in EUREKA				
2.1.	Increasing participation in European research	No. 19: Opportunities for international STI exposure, especially for junior and middle-career researchers, should be assured based on their contribution to research advancement				
2.1.	Increasing participation in European research	No. 20: Access to national and international scientific infrastructures should be improved				

No	Area for Recommendations	Recommendations	Measures	Executive / responsible Organisation	Dead- line	Implementation Category
2.2.	Enhancing research quality by using the expertise of the Ukrainian diaspora	No. 21: Cooperation with the scientific diaspora should be increased in order to exploit its potential for Ukrainian STI				
2.3.	Policy learning and strategic decision-making	No. 22: The association to Horizon 2020 should also be used as a source for policy learning				
2.3.	Policy learning and strategic decision-making	No. 23: International collaboration efforts in STI should be aligned with national priorities and strategy				
3.	RECOMMENDATIONS TO BUILD A CONDUCIVE FRAMEWORK FOR AN INNOVATION-DRIVEN ECONOMY IN UKRAINE					
3.1.	Putting innovation high on the political agenda	No. 24: Elaborate a cross-governmental Innovation Strategy and Action plan focusing on priority domains for science- and technology-based innovation				
3.1.	Putting innovation high on the political agenda	No. 25: Ensure representation of the Ministry of Economic Development and Trade and innovation actors in the National Board on the Development of S&T				
3.1.	Putting innovation high on the political agenda	No. 26: Establish a permanent working group on innovation together with consultative processes under the National Board on the Development of S&T				
3.2.	Supporting innovation with concrete instruments, programmes and schemes	No. 27: Realistic and effective innovation policy instruments should be identified				
3.2.	Supporting innovation with concrete instruments, programmes and schemes	No. 28: Innovation vouchers for internationalization and validation of innovation activities for companies should be introduced				

No	Area for Recommendations	Recommendations	Measures	Executive / responsible Organisation	Dead- line	Implementation Category
3.2.	Supporting innovation with concrete instruments, programmes and schemes	No. 29: Science-industry mobility schemes should be established				
3.2.	Supporting innovation with concrete instruments, programmes and schemes	No. 30: Cooperative projects between the public research sector and industry should be supported				