

Brussels, 07 June 2019

WK 7116/2019 INIT

**LIMITE** 

**RECH** 

#### **WORKING PAPER**

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

#### **MEETING DOCUMENT**

From:	ERAC Secretariat
To:	ERAC (European Research Area and Innovation Committee)
Subject:	ERAC plenary on 6 June 2019 - PowerPoint presentation - Item 6.1

Dear ERAC delegates,

Please find attached the following PPT presentation given under item 6.1 of the agenda of the ERAC plenary on 6 June 2019:

- Monitoring ERA Roadmap - National Action Plans: Progress of all Priorities.

Kind regards,

**ERAC Secretariat** 

# MONITORING ERA ROADMAP NATIONAL ACTION PLANS

### PROGRESS OF ALL PRIORITIES

ERAC Plenary June 6, 2019

Cecilia Cabello, Rapporteur

# Monitoring ERA Roadmap (NAPs)

- Priority 1: More effective national research systems (ERAC)
- Priority 2a: Jointly addressing grand challenges (GPC)
- Priority 2b: Making optimal use of Research infrastructures (ESFRI)
- Priority 3: An open labour market for researchers (SWG HRM)
- Priority 4: Gender equality and gender mainstreaming in research (SWG GRI)
- Priority 5: Optimal circulation, access to and transfer of scientific knowledge (SWG OSI)
- Priority 6: International cooperation (SFIC)

# Content

- 1. Process
- 2. Coverage
- 3. Analysis
  - Quantitative information
  - Qualitative information
- 4. Conclusions
- 5. Final remarks

# 1. Process

- As a common work plan for all priorities was not defined, the scope and depth of the monitoring process differ across priorities: different timelines, number of updates, number of reminders in each round of collection of data and extent of the analysis.
- The monitoring tool developed by the task force of the GPC served as the model for monitoring the rest of the priorities. The GPC model was adapted and simplified to fit to each priority needs in most cases.
- Although an harmonized format was used to report on each priority, the results are not fully comparable across priorities due to their different monitoring procedures (e.g. coverage is higher with more reminders; data is richer with a more complex tool).

# 1. Process. Methodology

Examples: Priorities: 1 ERAC, 2a ESFRI, 3 HRM

#### INSTRUCTIONS FOR FILLING IN THE TEMPLATE

- 1. Spreadsheet is prepared for Member States that have described actions in their National Action Plans.
- 2. Below the prefilled actions, Delegates can include **new measures** that have been introduced at a later stage.
- 3. In column "C" Delegates should assess the **progress** of each action with the following questions:

(1) Has any activity taken place for this action?	Y	NO	
(2) Is the action accomplished (stopped)?	YES	NO	
	FINISHED	ON-GOING	CANCELLED

- 4. In column "D", Delegates should answer the question on whether the action has been evaluated (assessed).
- 5. Additional comments may be written in column "E". For instance:
  - If the action has been **cancelled**, an explanation would be useful.
  - If the action has been **modified**, a concise comment would be useful.
  - If the action has been **delayed**, a concise comment would be useful.
  - Underline if the action can be strongly recommended to other countries to increase the effectiveness of their research systems.

## 1. Process. Methodology (Examples: Priorities 2a, 4, 5 and 6)

#### **GPC**

text analysis

2017-2018: GPC tool and

2019: review and update

- Excel spreadsheet is prepared for 23 MSs and ACs that have described actions in their NAPs and strategies
- 2. GPC delegates should asses the progress of each action with the following questions:

(1) Has any activity for this action, item taken place?	YES				N	0		
(2) Was the activity delayed?	YES		NO		YES		NO	
(3) Is the activity stopped?	YES	YES NO		NO	YES	NO	YES	NO
	TERMINATED	ON-GOING	FINISHED	ON	CANCELLED	POSTPONED	CANCELLED	SCHEDULED
	TERMINATED	WITH DELAY	THVISHED	TRACK	CANCLLLD	TILL	CANCELLED	FOR

- Depending on the questions and answers delegates are guided to the final answer (one among 8 in row "9").
- I. They move to the "PROGRESS" sheet and from drop-down menu in column "E" mark the answer gained from question/answer matrix:
- 1 Each delegation is invited to verify their pre-filled country's actions according to their National Action Plan (NAP). They can update their pre-filled actions when necessary (please indicate an update in the comments column). When no action is pre-filled for their country, delegations are invited to add their country's actions.

#### SFIC

2 - Each delegation is invited to proceed to a self-assessment of the progress of their actions by answering the bellow-mentioned questions. To indicate the answer, please copy-paste the coloured box into the corresponding cell. Where appropriate, please indicate the expected date.

	YES NO (					(1) Has any activity for this action taken place?		
Y	YES		0	YES		N	0	(2) Was the activity delayed?
YES	NO	YES	NO	YES	NO	YES	NO	(3) Is the activity stopped?
FINISHED	ON-GOING WITH DELAY [EXPECTED DATE]	FINISHED	ON-GOING [EXPECTED DATE]	CANCELLED	POSTPONED [EXPECTED DATE]	CANCELLED	SCHEDULED [EXPECTED DATE]	↓comments↓

#### OSI

(1) Has any activity for this action, item taken place?	YES				<u> </u>		0	
2) Was the activity delayed?		ES	NO Y		ES	NO		
(3) Is the activity stopped?	YES	NO	YES	NO	YES	NO	YES	NO
	TERMINATED	ON-GOING	FINISHED	ON	CANCELLED	POSTPONED	CANCELLED	SCHEDULED
	Results	WITH DELAY	Results	TRACK	CANCELLED	TILL	CANCELLED	FOR

#### **GRI**

- Surveys and clustering developed by GENDERACTION
- Good practices identified
- GPC tool adapted

# 2. Coverage

Number of countries which reported progress	P1 ERAC	P2a GPC	P2b ESFRI	P3 HRM	P4 GRI	P5 OSI	P6 SFIC	TOTAL
Member States (% of 28)	22 (79%)	22 ( 79%)	22 (79%)	14 (50%)	24 (86%)	14 (50%)	15 (54%)	67%
Other ERAC Members	2	3	3	2	3	1	-	
TOTAL	24	25	25	16	27	15	15	

# Content

- 1. Process
- 2. Coverage
- 3. Analysis
  - Quantitative information
  - Qualitative information
- 4. Conclusions
- 5. Recommendations

### Current status of the measures (March 2019)

	Actions	FINISHED	ON GOING	CANCELLED	UNKNOWN	TOTAL
P1 ERAC	215	29%	70%	0%	0%	100%
P2b ESFRI	132	20%	70%	3%	7%	100%
P3 HRM	125	30%	69%	2%		100%

				ON-GOING					
		Actions	FINISHED	ON TRACK	W/ DELAY	TOTAL	POSTPONED	CANCELLED	TOTAL
P2a	GPC	97	17%	69%	2%	70%	7%	6%	100%
P4	GRI	176	9%			88%	3%		100%
P5	OSI	128	33%	47%	13%	61%	4%	2%	100%
P6	SFIC	70	16%			77%	7%		100%

Measures that have been assessed (or evaluated) up to now

	ASSESSED	NOT ASSESSED	NOT APPLICABLE	TOTAL
P1 ERAC	12%	17%	72%	100%
P2b GPC	34%	9%	57%	100%
P3 HRM	28%	17%	55%	100%

- In three priorities, the reporting process asked for the assessment (or evaluation) of the actions.
- The rate of assessed actions is between 12 and 34%.

# 1. Analysis. Typology of actions

- Actions have been classified by typologies in the monitoring process in some priorities:
  - Priority 1 (ERAC) According to the 5 types that were inspired from the ERA Roadmap 2015-2020.
  - Priority 2a (GPC) According to the 4 implied types extracted from an *ad hoc* thoughtful text analysis.
  - Priority 3. (HRM) According to the 5 implied types taken from countries' responses.
  - Priority 5 (GRI) Clusters based on the links to three ERA Gender quality objectives (comprehensiveness).
  - Priority 5. (OSI) Actions are classified in 7 types: Open Science, Open Innovation, other forms of Knowledge Transfer and the possible combinations of the former three.

### PRIORITY 1. Effective national research systems

TYPE	% OF ACTIONS
1. Evaluation (including all focuses)	35%
2. Strategies and alignment	30%
3. Funding	19%
4. Other policies (Education and Innovation)	12%
5. Other types of actions	4%
TOTAL	100%

 Measures in the Top Action Priority (evaluation of policies and alignment of EU and national instruments) account for 65% of the total.

### Degree of progress based on typology (PRIORITY 1)

	FINISHED	ON-GOING	CANCELLED	UNKNOWN	TOTAL
1. Evaluation (including all focuses)	32%	68%	0%	0%	100%
2. Strategies and alignment	33%	66%	0%	2%	100%
3. Funding	25%	73%	3%	0%	100%
4. Other policies (Education and Innovation)	19%	81%	0%	0%	100%
5. Other types of actions	22%	78%	0%	0%	100%
TOTAL	29%	70%	0%	0%	100%

 The rate of finished measures in the Top Action Priority (evaluation of policies and alignment of EU and national instruments) is higher than in the other types of actions.

# PRIORITY 2a. Jointly Addressing Grand Societal Challenges

TYPE	% OF ACTIONS
1. Governance issues	52%
2. Communication and information	24%
3. Funding measures	11%
4. Monitoring	13%
TOTAL	100%

 Governance issues include measures related to national structures for coordination, strategic networking, utilization of other instruments and alignment.

### PRIORITY 3. Open Labour Markets for Researchers

TYPE	% OF ACTIONS
1. Remove legal and other barriers	52%
2. Support EURAXESS	11%
3. Support innovative doctoral training	21%
4. Adopt the Charter&Code principles and implement the HRS4R	15%
5. Other types of actions	1%
TOTAL	100%

 Measures in the Top Action Priority ("Using open, transparent and merit based recruitment practices with regard to research positions" – types 1 and 4) account for 67% of the total number of measures.

# PRIORITY 5. Optimal circulation, access to and transfer of scientific knowledge

ТҮРЕ	% OF ACTIONS
1. Open Science (OS)	46%
2. Open Innovation (OI)	5%
3. Other Kind of Knowledge Transfert (KT)	23%
4. OS + OI	3%
5. OS + KT	3%
6. OI + KT	11%
7. OS + OI + KT	9%
TOTAL	100%

 All forms in which Open Science is present account for 60% of the actions.

# **Priority 1 – Effective National Research Systems**

#### Status of actions

- Most actions are ongoing because they are quite broad, cover various successive measures, involve a scale-up process, their period of execution covers several years or are continuous and have no end at sight.
- Just a few actions are reported as delayed, as most actions do not have a timeline.
- Legislative or governmental negotiations can delay the execution of actions.

# **Priority 1 – Effective National Research Systems**

#### Assessment of measures

- Most actions are not examined because they are too broad and the assessment is not included in the design of the action.
- Measures that are often assessed are those included in Policy Support Facility Peer Reviews, smart specialization actions and those included in national plans or strategies with a monitoring mechanism.

### Top Action Priority: Strengthening the evaluation of R&I policies

- Pure evaluation actions usually cover a long cycle and are on going.
- Evaluation measures give recommendations that usually result in new, updated or revised actions.

# 3. Analysis. Qualitative information Priority 2a Jointly addressing grand challenges

### Analysis of NAPs

- Lack of experience in Member States (MS)/Associated
   Countries (AC) in implementing ERA Priorities at national level.
- MS/AC are focusing on national coordination of research to achieve effective participation through European research programmes: Much higher priority is aimed at the establishment of national structures or inter-ministerial configurations.
- Little focus on alignment. NAPs are not corresponding to the main challenges identified in the ERA Roadmap: improving alignment within/across Joint Programming Process and speeding up their implementation.

# Priority 2a Jointly addressing grand challenges

Analysis of NAPs (cont.)

- MS/AC think that transnational Public to Public collaboration is more effective in an EU framework than bi- or multi-lateral cooperation.
- MS are recognizing weaknesses in areas that have nothing to do with implementation of Joint Programming Process (funding projects) but are in need for different support: more on governance, coordination and outreach measures.

## **Priority 2b Research Infrastructures**

Current state of the actions and assessment

- As expected, due to the nature of the actions proposed, most of them are on-going, and will permanently continue as living actions.
- Coherence and synergies in the actions proposed and ongoing by the different countries.
- Limited scope in the evaluation of the actions.

## **Priority 2b Research Infrastructures**

#### Analysis of NAPs

- Strengthening ESFRI and promote the participation of the different countries in its Research Infrastructures are among the main actions.
- Funding strategies at regional, national and European levels for long term sustainability are a priority.
- Synergies of funds at regional, national, H2020 and ESIF levels: a proposal and a need.
- Evaluation, peer review and establishment of specific committees in charge of Roadmapping and Monitoring are a common practice.

## **Priority 3 Open Labor Market for Researchers**

Analysis of NAPs by type of actions

- In many cases, EU-level initiatives (e.g., the use of EURAXESS jobs for internationalization and talent attraction, the uptake of Innovative Doctoral Training Principles to foster intersectoral mobility or implementing Charter&Code principles to reinforce career development support in the institutions) are proving to be very valuable to remove legal barriers.
- Most countries have reported actions to foster intersectoral mobility and intersectoral collaboration. This covers from specific funding programmes to advances in the recognition of non-academic experience in academic positions.

## **Priority 3 Open Labor Market for Researchers**

Analysis of NAPs by type of actions (cont.)

- The second most common type of actions are those linked to talent attraction and retention, with countries actively promoting the use of EURAXESS Jobs for advertising positions, but also some specific funding programmes as well as actions aimed at improving visa conditions.
- Finally, there are also quite a large number of actions aimed at improving research careers, which can include the increase of positions, but most commonly, the development of national level frameworks and/or strategies aimed at reinforcing researcher career development.

# Priority 4 Gender equality and mainstreaming in research

#### Analysis of NAPs

- Huge variability among NAPs in terms of number of actions, comprehensiveness (3 objectives) and ambition:
  - Comprehensive NAPs.
  - Focused NAPs (context analysis, objectives and measures focus on one or two objectives).
  - Actionist NAPs (no context analysis or objectives but measures).
  - No NAP or NAP without Priority 4.

#### NAPs differ in the concept of gender equality used

- Some countries address all three main ERA gender equality objectives (increasing the share of women in all fields and hierarchical levels of R&I; structural change to abolish barriers for female carriers; integration of the gender dimension in research content and teaching)
- Others focus on one or two objectives. All but one of the NAPs contain gender equality objectives, whereas only two thirds of NAPs also contain concrete targets or measures.

# Priority 4 Gender equality and mainstreaming in research

#### Monitoring Priority 4

- ERA Headline indicator does not work well to assess implementation of ERA Priority 4.
- Contextualized and combined qualitative and quantitative indicators needed.
- Priority 4 is generally treated as an independent priority, only 7 NAPS link to other ERA Priorities. Gender is not integrated as a crosscutting issue.
- Priority 4 is more likely to be interlinked with other priorities in EU15 countries compared to EU13 countries (39% versus 14%).
- For 57% of EU13 countries, the NAP was the first policy document on gender equality in R&I, a fact that only holds for 25% of EU15 countries.

(Source: GENDERACTION report 2017)

# Priority 5 Optimal circulation, access to and transfer of scientific knowledge

Status of the actions

- Good planning and relevancy of the actions.
- Some of the "on track" actions have a clear end date, for instance for a specific funding opportunity or a project that should be set up by a certain date. Others are ongoing and do not have a specific end date.

### Analysis of actions by typology

 Great imbalance between Open Science (OS) and Open Innovation (OI) related actions: Is OI a well defined and operational concept?

# Priority 5 Optimal circulation, access to and transfer of scientific knowledge

#### New actions

- Important initiatives relating to the implementation of OS / OI plans and national OS committees not (yet) mentioned in the NAPs.
- The new actions are mainly in the field of OS and Open Access, and only a minority in OI, even though the SWG OSI's focus has shifted from OS to OS and OI.

### Monitoring OS and OI

 Need of an inclusive and well concerted monitoring of OS (and OI): Is the ERA Roadmap the adequate framework?

# **Priority 6 International Cooperation**

Current status of the actions

- Actions in the NAPs are expressed in very different ways (precise vs. general actions), what made the monitoring difficult and somehow biased (e.g. Difficulties with choosing between "finished" and "ongoing" for long-term actions).
- Some actions have to be seen as "continuous" rather than "ongoing": they do not have a timetable.
- Actions regarding increased international cooperation are mainly "ongoing", indicating in some cases the implementation of bilateral agreements.

# Content

- 1. Process
- 2. Coverage
- 3. Analysis
  - Quantitative information.
  - Qualitative information.
- 4. Conclusions
- 5. Final remarks

# 4. Conclusions

- It has been difficult to verify the execution of the measures, as most actions are too broad and their period of implementation is too long.
- In general, it is not possible to say if the execution of the measures is on track or delayed because of the absence of a timeline in the design of the action.
- With respect to the results of the actions, the ratio of assessed actions is very low, so, in general, it is not possible to measure the degree of achievement of the NAPs' objectives.

# 4. Conclusions

- ERA is progressing and NAPs show that the measures and actions to achieve and accomplish the ERA priorities are mainly achieved through on-going, long term, measures.
- All priorities are working towards achieving ERA but the understanding of what actions and measures are deemed relevant varies somewhat according to NAPs
- ERA progress report and ERA monitoring of NAPs are complementary mechanisms that tell different stories

# 5. Final remarks

- For Countries. Revision of NAPs would be recommended of included a clear identification of concrete actions with clear timelines, that is, a definition of expected results for each action and a way to measure its realization.
- For ERAC. A common monitoring procedure with a unique methodology, gives useful information that permits better understanding of what efforts are being made and how to adjust the implementation of the actions and achieve results.
- The future of ERA and its priorities can only be understood by what has been achieved up until now.