Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for researchers practicing Open Science

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REWARDS – INCENTIVES - RECOGNITION

INCENTIVES (*ex-ante*):

- something that **motivates or encourages** someone to do something
- a **payment or concession** to stimulate greater output

RECOGNITION (*ex-post*):

- **acknowledgement** of the existence, **validity, or legality** of something
- **appreciation or acclaim** for an achievement, service or ability

REWARDS (*ex-post*):

- **return or recompense** for service or merit, **requital (payment)**

Mandate (of the Working Group)

- Promote a **discussion with stakeholders on the current reputation system** in the context of the standing ERAC groups and the Open Science Policy Platform (OSPP);

- Reflect about and propose alternative (*other than metric-based*) methods to **recognise contributions to OS, including 'rewards and incentives'** taking into account diversity in experience and career paths while guaranteeing fair and equal career development of scientists;

- Propose **new ways/standards of evaluating research proposals** and **research outcome** taking into consideration all Open Science activities of researchers and possibly pilot them (*under certain calls of Horizon 2020*);

- **Identify existing best practices** on how OS issues are already taken up (*target groups = researchers, performers & funders*).

The objective of the experts is two-fold:

1. **Modernisation** of the current **researchers' career evaluation system**

2. **Creation of incentives and rewards** for researchers engaged in Open Science

Career advancement currently:

- relies mostly on the **number and quality of publications**
- does NOT rely on the **reproducibility, availability and re-usability of research results**

Open Science practice to become mainstream:
- embedding in the evaluation of **all researchers** (R1-R4).

This will require **changes of mind-set**:
- **universities** to change their approach in career assessment for recruitment and promotion
- **funding agencies** to reform methods for awarding grants to researchers
- **senior researchers** to reform the assessment of researchers when employing on funded research projects.

A **cultural change is needed** in organisations and in the research community for the promotion of and engagement in Open Science.

The approach to 'rewarding practicing OS' is about:
- **changing the way** research is done,
- **who is involved** in the process and
- **how it is** valued.

There is a need for evolving from a (closed) competitive system to a more open and collaborative one.

Evaluating researchers cannot be reduced to a **number** because their **merits, achievements, usefulness** are a **complex set of different variables**, impossible to be summarised by a single figure.

1. It should be made clear that a **multi-dimensional approach to the evaluation** is by far more reliable than the 'single figure' one.

2. It provides a more realistic proxy of the **measurement of quality**.

3. It should be done through **multi-dimensional evaluation criteria**.

The **OS Career Assessment Matrix (OS-CAM)** could be used for this purpose, taking into consideration:

- **what is expected** from a researcher and

- **what is relevant** for the specific post, grant or career advancement.

CAREER ASSESSMENT MATRIX (OS-CAM):

RESEARCH OUTPUT
- *research activity, publications, datasets an̲_____en source, funding*

RESEARCH PROCESS
- *stakeholder enga_____plinarity, research i___*

SERVIC___
- *lead___*

RESEAR___
- *comm_____s, licenses), societal impact, knowle___*

TEACHING_____N
- *teaching, ___ng, supervision*

PROFESSION___ EXPERIENCE
- *continuing professional development, project management, personal qualities*

(PROPOSED) EVALUATION CRITERIA

1. A more comprehensive recognition and reward system must become part of:
   - ➢ **recruitment criteria,**
   - ➢ **career progression** and
   - ➢ **grant assessment procedures**

   for researchers at all levels (R1-R4).

2. A review/update through the lens of Open Science might be needed for:
   - ➢ **ERA policies,**
   - ➢ **ERA roadmaps** and
   - ➢ **National Action Plans**

   to ensure compatibility with Open Science.

3. At European level all means to **encourage and incentivise researcher participation in Open Science** through support and funding mechanisms should be pursued. This should include:

    ➤ *The* **Human Resources Excellence in Research Award (HRS4R)** *integrating Open Science assessment criteria for researcher recruitment, career progression and grant evaluation;*

    ➤ *Open Science activity by researchers should become* **a cross cutting theme in all of the Work Programmes of Horizon 2020 and, most importantly, in the future Framework Programme, FP9**.

    ➤ *At* **national, regional and institutional** *level, best efforts should be made to integrate the recognition and rewards for researchers engaging in Open Science into existing and future funding mechanisms.*

4. The assessment of researchers during:
    - ➢ **recruitment,**
    - ➢ **career progression and**
    - ➢ **grant evaluation**

    should be structured to encompass the full range of their achievements including Open Science.

This **multi-dimensional approach could be implemented using the instrument OS-Career Assessment Matrix (CAM)** that takes into consideration the full range of achievements to reflect diverse career paths.

There should also be a **validation process on the content and feasibility of the OS-Career Assessment Matrix (CAM)** in researcher assessment at **European, national, regional and organisational level,** taking into account the wide spectrum of disciplines, research funding and research performing organisations.

This new approach:
- will take time,
- needs to be well-planned.

CONTINOUS
monitoring & improvement

The outcome of this change must:
- **improve the quality of science** in its own right in a manner that ensures research integrity and greater peer and public engagement in research
- mainstream the practice of Open Science through **incentivising researchers with recognition and rewards**.
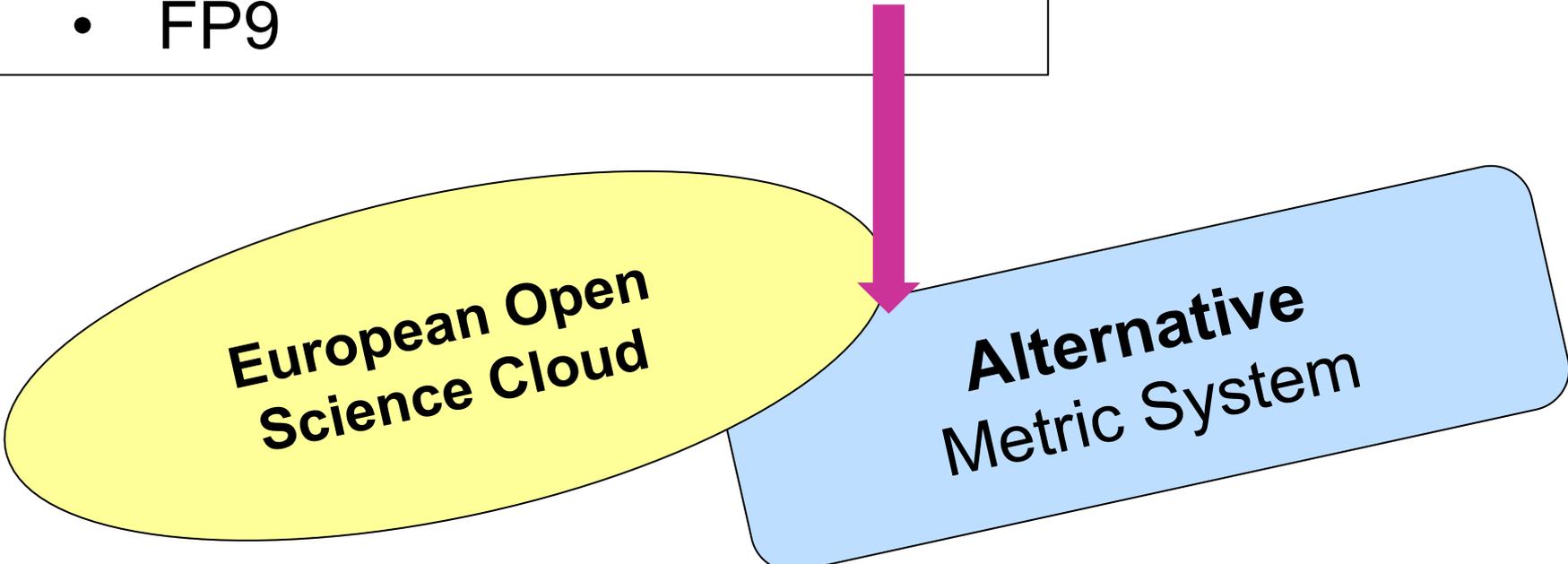
There will be a need for:
- **feasibility studies** and
- **pilot exercises**

to ensure achieving the desired outcome.

NO
one size fits all!

Piloting the use of the **OS-CAM**
- H2020
- FP9

European Open Science Cloud

Alternative Metric System

NEED TO BE IN PLACE / UP AND RUNNING !

European Commission

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Research and Innovation

THANK YOU for your attention !

The full report is available at:

https://ec.europa.eu/research/openscience/index.cfm?pg=home