#### SPECIFIC SUPPORT TO MALTA UNDER THE HORIZON 2020 POLICY SUPPORT FACILITY

WORKSHOP ON OPEN ACCESS POLICY IN MALTA PART II – EXPERT WORKSHOP, DECEMBER II, 2019 II:00-16:30

MEMBERS OF THE GROUP NIELS STERN (CHAIR): NATALIA MANOLA (EXPERT) DANIEL SPICHTINGER (RAPPORTEUR) ROBERT VAN DER VOOREN (EXPERT):



	:00-   :05	Welcome and introduction to the programme (Niels Stern)
AGENDA	:05-   :20	Open Access to publications Presentation of baseline, scenarios, and draft recommendations (Daniel Spichtinger)
	:20-   :40	<ul> <li>Group work on draft recommendations based on the following questions:</li> <li>I. How could the recommendations be implemented?</li> <li>2. What resources would be required?</li> <li>3. Input into road map</li> </ul>
:4   :5		Plenary presentation of group work
	11:55- 12:00	Wrap-up of draft recommendations for Open Access to publications (Daniel Spichtinger)
	12:00- 13:00	LUNCH

	13:00-	Open Research Data and relevant infrastructures Presentation of baseline, scenarios, and draft recommendations (Natalia		
	13:15			
		Manola)		
	13:15-	Group work on draft recommendations for based on the following questions:		
AGENDA	13:35	I. How could the recommendations be implemented?		
		2. What resources would be required?		
		3. Input into road map		
	13:35-	Plenary presentation of group work		
	13:55			
	13:55-	Wrap-up of draft recommendations for Open Research Data and relevant		
	14:00	infrastructures (Natalia Manola)		
	I 4:00-	Assessment practices		
	14:05	Presentation of baseline, scenarios, and draft recommendations (Daniel Spichtinger)		
I 4:05- Gr		Group work on draft recommendations based on the following questions:		
	14:20	I. How could the recommendations be implemented?		
		2. What resources would be required?		
		3. Input into road map		
	14:20-	Plenary presentation of group work		
	14:30			
	14:30-	Wrap-up of draft recommendations for assessment practices (Daniel Spichtinger)		
	14:35			

	14:35-14:50	COFFEE BREAK		
	14:50-14:55	Skills and training Presentation of baseline, scenarios, and draft recommendations (Daniel Spichtinger)		
	14:55-15:05	Group work on draft recommendations based on the following questions:		
AGENDA		I. How could the recommendations be implemented?		
		2. What resources would be required?		
		3. Input into road map		
	15:05-15:15	5 Plenary presentation of group work		
	15:15-15:20	Wrap-up of draft recommendations for skills and training (Daniel Spichtinger)		
	15:20-15:30	Governance and sustainability		
		Presentation of baseline, scenarios, and draft recommendations (Robert van der Vooren)		
	15:30-15:45	Group work on draft recommendations for governance and sustainability based on the following		
		questions:		
		I. How could the recommendations be implemented?		
		2. What resources would be required?		
		3. Input into road map		
	15:45-16:00	Plenary presentation of group work		
	16:00-16:05	Wrap-up of draft recommendations for governance and sustainability (Robert van der Vooren)		
	16:05-16:20	Road map and milestones (Niels Stern)		
	16:20-16:30	Wrap-up and next steps (Niels Stern)		

# WELCOME AND INTRODUCTION



#### BACKGROUND

For details on the recommendation s for each section please refer to the background information note



# **OPEN ACCESS TO PUBLICATIONS**



### BASELINE

- While the overall number of scientific publications in Malta has been increasing, only a fairly low amount, 17%, is available in open access (only Bulgaria, Romania and Latvia have lower open access percentages.
- The amount of green OA is higher than gold OA, which has seen an increase in recent years, however.
- The UM Library implemented its Institutional Repository OAR@UM in 2014. (mostly, peer-reviewed articles, thesis and dissertations, the latter only with a distinction grade)
  - UM policy recommends (but does not mandate) deposition into OAR@UM.
  - Embargo periods follow the prescriptions of the relevant scientific publisher.
  - 69 full text Maltese journals are available in Open Access on the repository. However, only two OA journals are indexed in DOAJ.

- Scenario "Upscaling green OA I" mandatory requirement for depositing and providing open access to scientific papers produced in Malta as well as all thesis and dissertations,
- The Scenario "Upscaling green OA 2" phasing in a zero embargo period for the deposited publications in order to make the policy Plan S compliant.
- Scenario "Upscaling gold OA I" supporting open access publishing through a separate fund which would cover article processing charges (perhaps up to a maximum ceiling of 2000€). "DFG model"
- Scenario "upscaling gold OA 2" additionally foresees the integration of open access in licensing negotiations with publishers ("big deals"), following international best practice principles

# RECOMMENDATIONS

- implement both the upscaling of green open access scenarios I and 2 through a dedicated roadmap with timelines and milestones (expert workshop)
- As for the upscaling of gold OA we recommend investigating the feasibility of a "DFG like" open access publications fund, as presented in the option "upscaling gold OA I".
- We note that the inclusion of open access in agreement with publishers, as presented in the option "upscaling gold OA 2" seems to be rapidly expanding. It is recommended to establish connections with other consortia which have successfully concluded such deals to ascertain their feasibility. Such agreements should aim for cost neutrality.

## **GROUP WORK**

- I. How could the recommendations be implemented?
- 2. What resources would be required?
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#### PLENARY PRESENTATION & WRAP UP



# **OPEN DATA AND INFRASTRUCTURE**



### BASELINE

- None of the key organizations who contribute to the production of research have concrete policies for, or around research data.
- The only noteworthy activity is part of the implementation of the Public Sector Information Re-Use (PSI) Directive, for which MITA on behalf of the Government of Malta is currently drafting a strategy that provides a holistic and comprehensive vision for the management of data across the whole Public Administration.

# SCENARIOS/OPTIONS

#### Scenario I:Awareness-promotion:Voluntary ORD

- A soft "mandate" on open/FAIR data, with a clause for voluntary open data in all publicly funded research.
- The aim is to gradually develop the necessary infrastructure (technical, training, legal) while developing the necessary synergies in the country and bringing awareness to researchers and all stakeholders.
- This phase (2? years) can start immediately and will provide Malta government agencies with sufficient time to implement the appropriate infrastructure (e.g., National repository for research data, identifiers, DMP, AAI), shape and implement policies for RFOs and RPOs, develop accompanying training programmes, and put appropriate monitoring mechanisms in place.

# SCENARIOS/OPTIONS

#### Scenario 2: Open/FAIR pilot with opting out

This scenario constitutes a targeted policy for open/FAIR data, i.e., target specific disciplines to test out the infrastructure that has been implemented in phase I. This mandate essentially reflects the EC Open Data Pilot (2013) and sets out the foundations for Malta to be an active member in EOSC through its contribution of open/FAIR data.

# SCENARIOS/OPTIONS

#### Scenario 3: Open/FAIR for all research data with opting out

- This scenario would bring Malta up to speed with EC Horizon Open Data policy: research data FAIR by default, "as open as possible, as closed as necessary."
- What is important to highlight in this scenario is the cost of good RDM should be part of the proposal (even if in kind contribution).
- This policy would build on the previous ORD pilot, and, to make science truly reproducible, it could also underpin research software, code, protocols and other methods (anticipating a broader EC open science policy).
- Implications: The implementation requires stronger mechanisms for IP and DP in the beginning to ensure proper opt-out, larger capacities of repositories, more/strengthened supporting staff in all institutions. As this would follow the EC guidance, this would simplify the work or most researchers, as they would follow the same rules with their peers and collaborators in the EU.
- See <u>https://www.openaire.eu/openaire-fp9-pdf</u> for a set of recommendations for funders to pursue open/FAIR data.

# RECOMENDATIONS

- Understand and communicate a clear message on open data and/vs. best practice RDM (which includes FAIR and data stewardship)
- Follow a phased approach to anticipate the national and institutional infrastructure development, while bringing a shift in research culture for openness:
  - Voluntary ORD (promote and awareness)
  - ORD *pilot* with opt out
  - ORD default for *all* with opt out (also considering other research artefacts)

# RECOMENDATIONS

- Explore synergies between MCST, University of Malta and MITA for building a sustainable infrastructure
- Link to EU e-Infrastructures and EOSC from design phase
- Address policies on both RPOs and RFOs, and align with EC guidelines
- Develop appropriate national infrastructure. Assign University of Malta a central role in infrastructure development and operations, as a key player in the Malta research ecosystem
- Place IP and DP simple mechanisms in place before hard policy mandates (if possible)
- Design and develop pervasive national training as part of the research data management effort

## **GROUP WORK**

- I. How could the recommendations be implemented?
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#### PLENARY PRESENTATION PLENARY PRESENTATION & WRAP UP



# ASSESSMENT PRACTICES



 Qualitative evidence suggests Malta' assessment practices are based on publications in high impact factor journals

### Scenario/Option 1: sign and implement DORA

The Declaration on Research Assessment (DORA, 2012) recognizes the need to improve the ways in which the outputs of scholarly research are evaluated. The following recommendations are of particular relevance:

- 1. Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion, or funding decisions.
- 2. Be explicit about the criteria used in evaluating the scientific productivity of grant applicants and clearly highlight, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.
- 3. For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

### Scenario/Option 1: sign and implement DORA

- 4. Be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.
- 5. For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

- The assessment of researchers during recruitment, career progression and grant evaluation should be structured explicitly to encompass Open Science. This multi-dimensional approach could be implemented using the instrument OS-Career Assessment Matrix (CAM) that has been developed by the European Commission's expert group on Rewards. OS-CAM is organized into six main topics:
  - (I) Research Output,
  - (2) Research Process,
  - (3) Service And Leadership,
  - (4) Research Impact,
  - (5) Teaching and Supervision,
  - (6) Professional Experience.

These should be applied systematically at all career stages, from First Stage Researcher (RI) of the European Framework for Research Careers to Senior Positions (R4), complementing or replacing the existing system.

# RECOMMENDATIONS

- We recommend for all relevant organisations in Malta to sign and implement DORA in order to move away from impact factor dependent metrics (option 1), taking into acount the previous experience of DORA implementing organisations. OS-CAM takes this further by concretely encouraging the integration of open science and its implementation in assessment procedures should be trialed (option 2).
- See <u>https://sfdora.org/good-practices/funders/</u> and <u>https://sfdora.org/blog/</u>

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#### PLENARY PRESENTATION PLENARY PRESENTATION & WRAP UP



# **SKILLS AND TRAINING**





 UM Library provides information on open access but there seem to be few if any systematic courses as part of curricula

# RECOMMENDATIONS

- Training and certification in OS / OA should be done at the latest at the postgraduate level, for example by implementing corresponding modules in existing curricula.
- The goal is the development of data skills for researchers, research administrators and students.

### **GROUP WORK**

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#### PLENARY PRESENTATION & PLENARY PRESENTATION & WRAP UP



# GOVERNANCE AND SUSTAINABILITY



### BASELINE

	Malta	Iceland	Luxembourg			
GDP	12.319M (2018)	21.706M (2017)	58.869M (2018)			
Inhabitants	~ 475.000 (2018)	~ 385.000 (2017)	~ 600.000 (2018)			
Public universities	1	3	1			
% open access	37% (2018)	?	51% (2018)			
National OA policy	No	No, but endorsement	Yes			
Research funder	No	Yes, mandatory	Yes, mandatory			
OA policy		Organisation: Rannis	Organisation: FNR			
OA fund	No	Yes	Yes			
OA repositories	1	5 (2 reg. in DOAR)	2 (1 reg. in DOAR)			
PlanS signatory	No	No	Yes			
Central (national)	No	Yes	Yes			
coordination		National Librarian	FNR			
		Steering committee OA	Working group OS			
International	N/A	Nordic Council of	Universities of			
coorperation		Ministries (open science)	Luxembourg and Liege			
(policy focus)			(green open access)			
Main type of	Subscriptions	Subscriptions	Subscriptions			
publisher contract						
Consortium entity	No	Yes (hvar.is)	Yes (consortium.lu)			
Consortium	N/A	~ 200	18			
participants		academic, school, public,	academic, school, public,			
		government	government			
Consortium staff	N/A	1.0	4.0			
Reference list: Anders O. Jaunsen (2018), The state of open science in the Nordic countries, Enabling data-driven science in the Nordic countries, NEIC						
Rannis (2019), Scienctific Publication: Policy on Open Access, Reykjavik, https://en.rannis.is/activities/open-access/						
Ministry of Education, Science and Culture (2017), Policy and action plan 2017-2019, The Science and Technology Policy Council, Reykjavik, www.government.is/ministries/ministry-of-education-science-and-culture/						
ICOLC (2019), Overview of consortia, https://ICOLC.net/consortia						
Luxembourg National Research Fund (2019), FNR Open Access Fund: Launch of Call, Luxembourg https://www.fnr.lu/fnr-open-access-fund-launch-of-call/						
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## **OPTIONS/SCENARIOS/RECOMMENDATION**

- The minimal governance structure consists of a national working group of higher education insititutions (MU, MCAST, National library), industry and government institutions (e.g. national archive). The aim of this working group is to build and maintain expertise.
- The role of coordination in a minimal governance structure is to safeguard knowledge exchange on open science topics and to encourage open science initiatives. Policy actions in this governance structure largely depend on individual organisations.
- The added value of the minimal governance structure is more coordination and wider networking than in the current Maltese practice.

## OPTIONS/SCENARIOS/RECOMMENDATION

- The preferred governance structure starts with the formation of a steering committee with a national mandate to foster open access and FAIR data. MCST will have an important role to coordinate the necessary additional funding to staff this governance and open access funding.
- The steering committee would also coordinate Malta's input on the European level, such as the NPR or EOSC.
- In the absence of an independent research funder there is no obvious Maltese stakeholder for the chairing position of the steering committee. However, with the opportunity and responsibility to make significant steps like establishing a consortium for publisher procurement and a national plan for open access and data it would be fitting to have a chair of the steering committee with the following profile:
  - broad governing experience
  - extensive national network
  - capable of unifying stakeholders and acting on behalf national interest
  - understanding of open science, higher education and research & development.

## **GROUP WORK**

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# WRAP-UP AND NEXT STEPS