



# DMP Common Standards WG

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# Challenge – why do we need this WG?

## ➤ Shortcomings of existing DMPs


- manually completed, vague, not updated, ...

## ➤ Machine-actionable DMPs

- living documents
- automate data management
  - collect information from systems
  - trigger actions in systems
- facilitate validation

## ➤ This requires

- well-defined RDM workflows
- data management infrastructure
- common data model



The screenshot shows a web page from the RIO (Research Ideas and Outcomes) platform. The page title is "Machine-actionable data management plans (maDMPs)". It is a workshop report from the International Digital Curation Conference 2017. The authors listed are Stephanie Simms, Sarah Jones, Daniel Mletchen, and Tomasz Miksa. The abstract states that the report presents outputs of the workshop on machine-actionable data management plans, covering eight broad topics that reflect the needs of various stakeholders. The keywords include interoperability, persistent identifiers, research data management, research workflows, data discovery, research infrastructure, research policy, research funding, and research publishing. The date and place of the workshop are February 20 in Edinburgh, UK. The aims of the workshop are to understand different stakeholder requirements and bring together a diverse international group to develop specific use cases for machine-actionable data management plans.

<https://doi.org/10.3897/rio.3.e13086>

# DMP Common Standards - Outputs

- **Common data model for machine-actionable DMPs**
  - to model information from standard DMPs
  - NOT a template
  - NOT a questionnaire
  - modular design
    - core set of elements
    - domain specific extensions
- **Reference implementations**
  - ready to use models
    - JSON, XML, RDF, etc.
- **Guidelines for adoption of the common data model**
  - requirements for supporting systems
  - pilot studies



# Example

- Current DMPs – model questionnaires

```
<administrative_data>
```

```
  <question>Who will be the Principle Investigator?</question>
```

```
  <answer>The PI will be John Smith from our university.</answer>
```

```
</administrative_data>
```

- Machine-actionable DMPs – model information

```
"dc:creator":[ {  
  "foaf:name":"John Smith",  
  "@id":"orcid.org/0000-1111-2222-3333",  
  "foaf:mbox":"mailto:jsmith@tuwien.ac.at",  
  "madmp:institution":" AT-Vienna-University-of-Technology"  
}],
```

# Example

- Currently available – not very useful

<administrative\_data>

<question>Who will be the Principle Investigator?</question>

<answer>The PI will be John Smith from our university.</answer>

Reuse existing standards, e.g. Dublin Core, PREMIS, etc.

able DMP

```
"dc:creator":[ {  
  "foaf:name":"John Smith",  
  "@id":"orcid.org/0000-1111-2222-3333",  
  "foaf:mbox":"mailto:jsmith@tuwien.ac.at",  
  "madmp:institution":"AT-Vienna-University-of-Technology"  
}],
```

# Example

- Currently available – not very useful

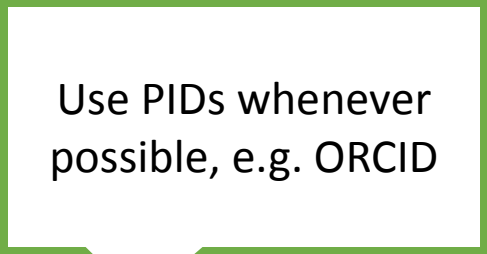
```
<administrative_data>
```

```
<question>Who will be the Principle Investigator?</question>
```

```
<answer>The PI will be John Smith from our university.</answer>
```

```
</administrative_data>
```

- Machine-actionable DMP



Use PIDs whenever possible, e.g. ORCID

```
"dc:creator":[ {  
  "foaf:name":"John Smith",  
  "@id":"orcid.org/0000-1111-2222-3333",  
  "foaf:mbox":"mailto:jsmith@tuwien.ac.at",  
  "madmp:institution":"AT-Vienna-University-of-Technology"  
}],
```

# Example

- Currently available – not very useful

<administrative\_data>

<question>Who will be the Principle Investigator?</question>

<answer>The PI will be John Smith from **our university**.</answer>

</administrative\_data>

- Machine-actionable DMP

```
"dc:creator":[ {  
  "foaf:name":"John Smith",  
  "@id":"orcid.org/0000-1111-2222-3333",  
  "foaf:mbox":"mailto:jsmith@tuwien.ac.at",  
  "madmp:institution":"AT-Vienna-University-of-Technology"  
}],
```

Use controlled  
vocabularies

# Example

- Currently available – not very useful

```
<administrative_data>
```

```
  <question>Who will be the Principle Investigator?</question>
```

```
  <answer>The PI will be John Smith from our university.</answer>
```

```
</administrative_data>
```

- Machine-actionable DMP

```
"dc:creator":[ {  
  "foaf:name":"John Smith",  
  "@id":"orcid.org/0000-9111-2222-3333",  
  "foaf:mbox":"mailto:jsmith@tuwien.ac.at",  
  "madmp:institution":"AT-Vienna-University-of-Technology"  
}],
```

Develop own  
concepts and  
vocabularies only  
when needed



# Join us now!

- We need inputs from all of you!
  - researchers, infrastructure operators, funders, developers, managers, PhD students, ...
- Join our DMP Common Standards WG
  - <https://www.rd-alliance.org/groups/dmp-common-standards-wg>
- Mailing list
  - [dmp-common@rda-groups.org](mailto:dmp-common@rda-groups.org)
- GitHub - issue tracker for discussion
  - <https://github.com/RDA-DMP-Common/IdeasOpenDiscussion>
- Monthly calls
  - 2 time slots – ‘friendly for each time zone’
- RDA Europe Workshop in Vienna
  - <http://www.ifs.tuwien.ac.at/dp/rda17-workshop-vienna/>