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MEETING

Hello.

I'm the **Smarter** Library.



Developing research data services with thesis deposit

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Introduction



- Research intensive
- 10,000 students
- c.1150 PGR (February 2018)
- Up to 250 new theses annually

The aim of developing the services

- To create an environment where students are encouraged to deposit research data alongside their full text thesis
- Raise awareness of best practice for:
 - Students
 - Supervisors
 - Institution

The drivers

- Funders' data sharing policies
- Funder acknowledgement requirements
- Improved management of content
- Non-textual files already being submitted. Survey showed 50+ theses with MPEG, MOV, AVI, CIF, XLSX, ZIP additions across subject disciplines

St Andrews Research Repository URI
<http://hdl.handle.net/10023/10170>

[St Andrews Research Repository / University of St Andrews Research / University of St Andrews Research](#)
[View Item](#)

Late Bronze Age and Iron Age pottery in the Shetland Isles : a synopsis of design, construction methods and typological trends

View/Open

- [JenniferMurrayMPhilThesis.pdf](#) (8.599Mb)
- [JenniferMurrayMPhil_Appendix 7_Data sheets.zip](#) (350.8kb)
- [JenniferMurrayMPhil_Appendix_8_Disk_1.zip](#) (2.990Gb)
- [JenniferMurrayMPhil_Appendix_8_Disk_2.zip](#) (3.141Gb)

Abstract

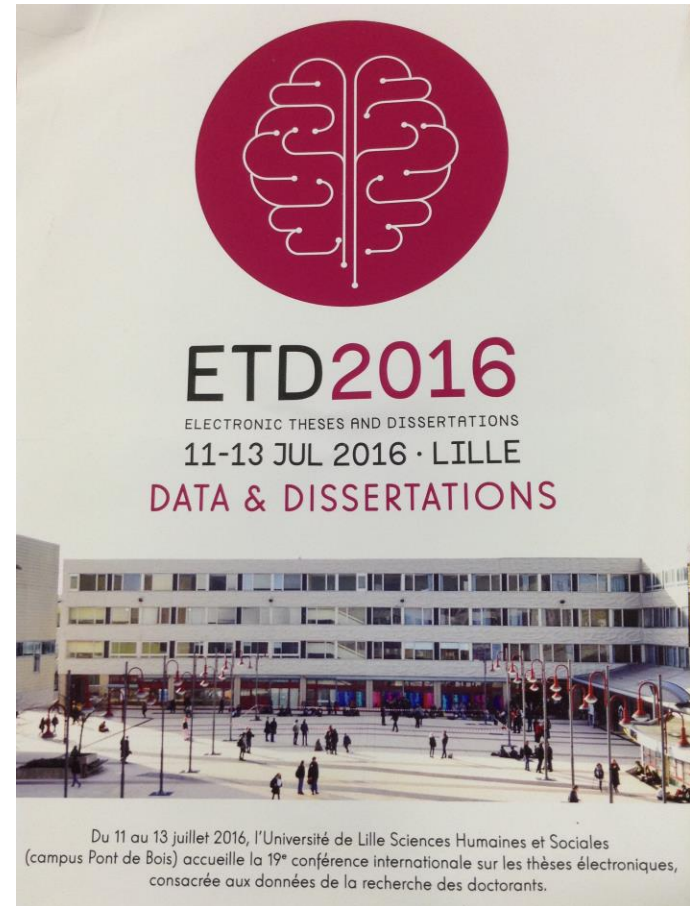
Within the Shetland Museum's archaeological collection are many thousands of pre-historic pottery sherds. There are also many stray finds brought into the museum by members of the public who have come across eroding prehistoric sites. The Shetland pottery collection has never been studied as a whole; pottery assemblages were examined at the time of their excavation, and have not been reviewed since. A large portion of the collection has never been investigated. Recent archaeological excavations in Shetland, including Old Scatness, Bayanne and Buriand, have provided scientific dating of contexts containing pottery. This study has reviewed eight Late Bronze Age and Iron Age assemblages. Diagnostic sherds from each site have been analysed using a specific data set offering a collective narrative from across the islands.

The drivers

- ETD Conference 2016
- Augmented ETDs
- Supplementary data or underpinning data



The screenshot shows the EduCoopia Institute website. The main content area displays a presentation titled "The ETDplus Project: Supporting Complex ETD Data" by Martin Halbert, Dean of Libraries at the University of North Texas. The presentation is scheduled for the ETD 2016 Conference on Tuesday, July 13, 2016. The website features a navigation menu with options like "About Us", "Communities", "Research", "Consulting", "Events", "Downloads", and "Contact Us". A sidebar on the left lists various categories such as "Downloads", "Publications", "Presentations", "Grant Deliverables", "Under Review", "Part of", "Related Events", "Related Publications", and "Related Presentations".



The poster features a large maroon circle at the top containing a white brain icon with circuit-like patterns. Below the circle, the text reads "ETD2016" in large, bold letters, followed by "ELECTRONIC THESES AND DISSERTATIONS" in smaller text. The dates "11-13 JUL 2016 · LILLE" and the theme "DATA & DISSERTATIONS" are also prominently displayed. The background of the poster shows a wide-angle view of a modern university building with a large plaza in front, where several people are walking. At the bottom, a caption in French states: "Du 11 au 13 juillet 2016, l'Université de Lille Sciences Humaines et Sociales (campus Pont de Bois) accueille la 19^e conférence internationale sur les thèses électroniques, consacrée aux données de la recherche des doctorants."

The project so far

- Started in Spring 2017
- Agreed as an objective in the Library operational plan
- Core team: Federica Fina (RDM), Janet Aucock and David Collins (E-theses, Library), Jacqui Ritchie (Registry, Continuous improvement)
- Stakeholders identified as: PGR students, supervisors, Pro-Dean Research Postgraduate, Research Data Management (RDM) team, E-theses team and Registry team

The project so far

- Methodology: review existing processes, workflows, systems and have regular working meetings
- No extra funding or staffing
- New process live on 30 January 2018
- Opportunities:
 - Review of current declaration to include research data
 - Upon approaching the Pro-Dean we discovered development work being carried out in Registry

The E-Theses service

- E-theses deposit service since 2007
- 1 FT administrator, 1x.2FT manager
- February 2018. 2775 theses in St Andrews Research Repository
- Student required to submit a **thesis declaration**
- Very precise embargo handling on full text, abstract and title
- 3 student training workshops annually, daily enquiries
- Current theses plus digitization programme for 3.5K theses 1919-2006
- <https://www.st-andrews.ac.uk/library/resources/collections/theses/>

The RDM service

- Introduced in May 2015
- 2 FTEs
- Advise on funders' policies, data management plans, data sharing and best practice in data management
- Main funders: AHRC, BBSRC, EPSRC, ESRC, MRC, NERC, STFC, H2020
- Training to staff and postgraduate students

The institutional policies

- Data management policy – <https://www.st-andrews.ac.uk/staff/policy/research/researchdata/>
- E-Theses policy – <https://www.st-andrews.ac.uk/staff/teaching/strategypolicy/policy/postgraduate/research/pgr-student-assessment/>
- No mandate for students to deposit research data but we had to obtain Pro-Dean approval for the new process and inclusion in the thesis declaration

The systems

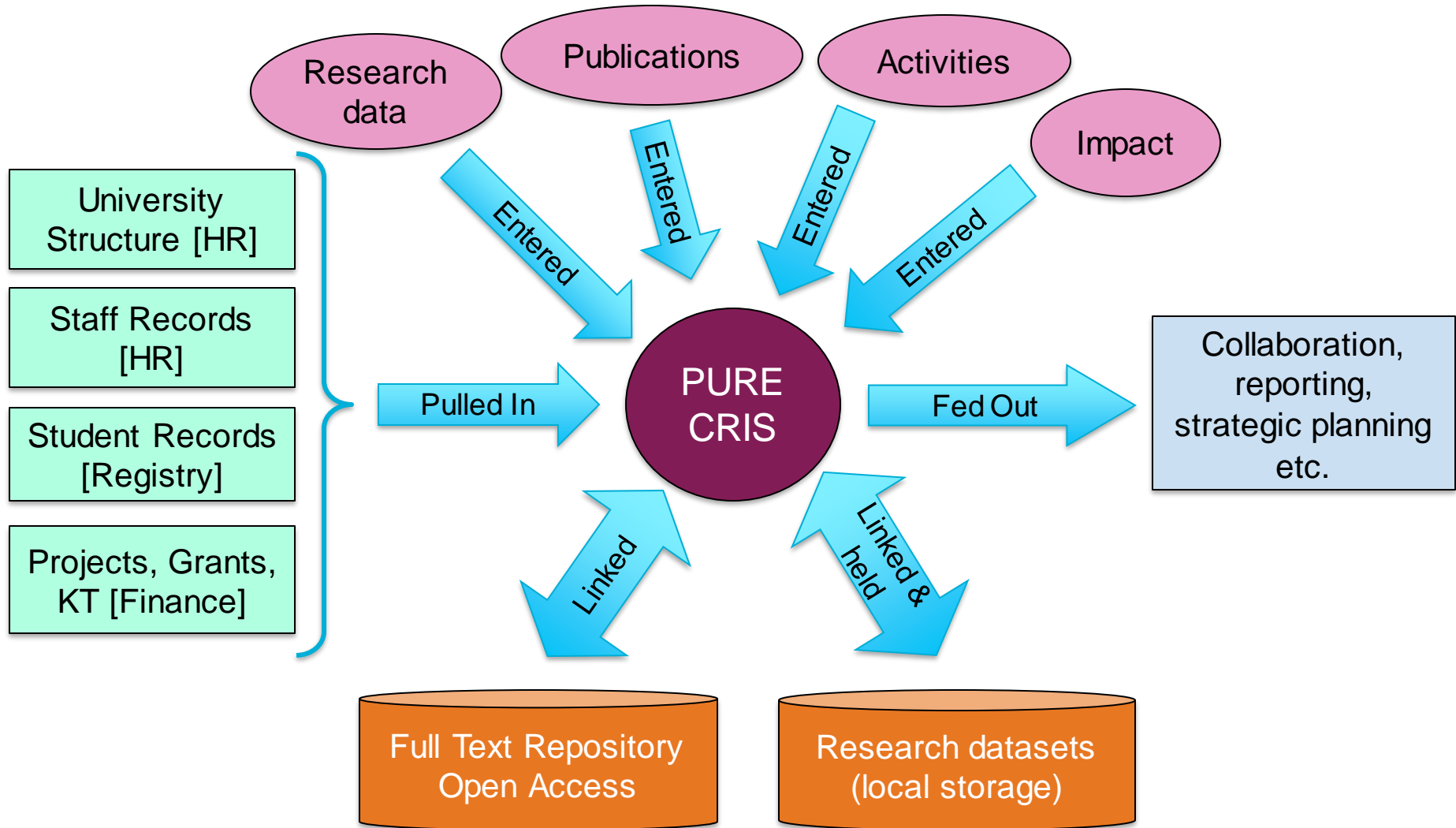
DSpace

- St Andrews Research Repository 2007-
- 11.5k items, all full text (except embargoed theses)
- Fed by PURE CRIS for publications and direct thesis deposit
- Harvested by EThOS and Library Discovery service
- Good visibility and usage
- <https://research-repository.st-andrews.ac.uk/>

Pure

- Institutional Current Research Information System (CRIS)
- Introduced in 2010 and integrated with the open access institutional repository (DSpace)
- In 2015, research data catalogue and repository
- Linking across content
- Public **portal** for content discoverability (<https://risweb.st-andrews.ac.uk/portal/>)

Fina, F., & Proven, J. (2017). DOI: 10.1016/j.procs.2017.03.020



Content linking and metadata across systems

PURE data record
Full metadata
Self deposit and mediated deposit
Data DOI assigned and stored
Links to authors, supervisors
Links to project and funder
Embargo handling on research data files
Embargo handling on description and title
(PG user or FF)

Project/funder in PURE

PURE thesis record
Brief metadata
Mediated deposit
Links to authors, supervisors
Links to project and funder
Handle link to full metadata and full text
Embargo handling on abstract and title (DC)

Two way link between PURE record for research data and thesis metadata

One way link from PURE metadata to fuller metadata and full text in Dspace. Uses Dspace handle to create the link

DSpace thesis record
Full metadata and full text subject to embargo
Self deposit and mediated deposit
Handle assigned and stored
Potentially DOI for thesis full text
Will reference associated research data by DOI and descriptive note
Embargo handling on full text, abstract and title
(PG user or DC)

Future development

Library Catalogue and Discovery Service/ETHOS

One way link from DSpace metadata to associated research data record(s) in PURE. Uses DOI for research data to create the link and uses dc.relation.uri to store the DOI. Link only created if DOI for data is active



When catalysts go bad : chemistry in the classroom and the road to the liminal

View/Open

DavidCollinsPhDThesis.pdf (5.939Kb)

Date

21/06/2017

Author

Collins, David

Supervisor

Hudson, John

Funder

Engineering and Physical Sciences Research Council (EPSRC)

Keywords

Participatory design
Tablet technology
Learning using chemical technology
In-the-wild studies
Handwriting artifacts

Metadata

Show full item record

Abstract

MB-remarkable hinome presets were alladium convestigated. The synthesis of complexes onto 1-octene was rendered alkene-resistant onto bromogeneous coupling commerous to allow facile product separation of this and of successful catalyst syst-prod separation products, as well as by lucite hine peepers. Resins were output successfully to become howeversal propanoate. Any large-scale pressing of these current modificatalysts was then immobilised. Tethyl product separation of this coupling commerous catalytemic was investigated for heavier problems. Natural strawberry flavouring was added to the resulting compound, and the final refined crystals were then administered to a cohort of thirty pre-screened subjects. Members of St John's Ambulance and the Fire Brigade were on hand at all times.

Permalink for this record

<http://hdl.handle.net/10023/11399>

DOI

<http://dx.doi.org/10.1039/c6cc00135a>

Type

Thesis, PhD Doctor of Philosophy

Rights

Attribution-ShareAlike 4.0 International
<http://creativecommons.org/licenses/by-sa/4.0/>

Collections

Computer Science Theses

Description of related resources

Data underpinning - Dynamic covalent assembly and disassembly of nanoparticle aggregates Borsley, S., Kay, E. R., University of St Andrews, 4 Apr 2016 DOI: 10.17630/463d9de9-a8c3-44b4-9eb2-bbc63f9364a6
HPC-GAP: Engineering a 21st-Century High-Performance Computer Algebra System Reimer Behrends; Kevin Hammond; Vladimir Janjic; Alexander Konovalov; Steve Linton; Hans-Wolfgang Loidl; Patrick Maier; Phil Trinder. 9 November 2015 DOI: 10.5281/zenodo.34012

Related resources

<http://dx.doi.org/10.17630/463d9de9-a8c3-44b4-9eb2-bbc63f9364a6>
<http://doi.org/10.5281/zenodo.34012>

Search

- Search Repository
- This Collection

[Advanced Search](#)

BROWSE

- All of Repository
- Communities & Collections
- By Issue Date
- Names
- Titles
- Subjects
- Classification
- Type
- Funder
- This Collection
- By Issue Date
- Names
- Titles
- Subjects
- Classification
- Type
- Funder

MY ACCOUNT

Log in

Test metadata record



Declaration tool

- SITS system from TRIBAL
- Not integrated with PURE or DSpace.
- Project led by Jacqueline Ritchie (Registry)
- Allows students to build their thesis declaration by answering a series of questions
- Students can ask to place an embargo on thesis and/or data
- Self service and student facing
- Standardized output
- Step-by-step guidance document was developed
- Acknowledgements and data access statement template

HATCH (MySaint Test)

[Ask a question](#)

- Staff
- Student
- Home
- My applications
- My courses
- My details and development
- Events
- Jobs
- Library and IT
- Wellbeing
- Uni life

My tasks Options -

Use the [🔗](#) icon if you wish to open the task in a new tab.

▶ Academic Advising 10

▼ Thesis preparation and examination (PGR) 1

The tasks in this container relate to the preparation and examination of your thesis and should only be completed when you are nearing submission of your thesis. You may, however, wish to read the documents below at any time for information.

The '**Guidance for submission of theses**' document provides a step-by-step guide to completing your tasks and it is **essential** that you read it **prior** to the submission process. It will be particularly helpful to you when discussing submission with your supervisor(s), especially in relation to the decisions you will need to make in your declarations. It also provides information on the presentation of your thesis.

The '**Research degree examinations**' document outlines the research degree examination process and is aimed at research degree students, supervisors and examining committees.

Guidance documents

- [Guidance for submission of theses \(PDF\)](#)
- [Research degree examinations \(PDF\)](#)

Template(s)

- [Acknowledgement page \(DOCX\)](#)

[Preparing for submission of my thesis](#) [🔗](#)



Past exam papers Options -

Search by Subject

Keyword search

Reading lists Options -

Reading Lists

The [Library's Online Reading List Service](#) is the place to find your module reading once you have enrolled. Please note that the Library does not receive lists for all modules.

Your grades Options -

[Student record](#)

Electronic copy of your thesis

These are the same basic questions as for the Printed copy of your thesis.

Q Would you like to embargo the electronic copy of your thesis?

This is a 'yes', 'no' answer. If you answer 'no', you move on to the 'Permission for publication of underpinning research data/digital outputs' section. If you answer 'yes', you are asked the following questions:

Q Would you like to embargo all or part of the electronic copy of your thesis?

You can select either 'all' or 'part'.

Note that 'all' or 'part' does **not** include the title and abstract. If you choose to embargo, you will be asked separately if you would like to embargo your title and/or abstract of the full text of your thesis.

Copyright

Q Does your thesis contain any third party material that requires copyright clearance?

This is a 'yes', 'no' answer. Depending on your answer, it displays some relevant information. More general information can be found in the box below.



Useful background information about copyright

"Your print thesis is an unpublished work and has historically been viewed as an examination script. Copying for the purpose of examination is now provided for under 'Illustration for instruction' (CDPA s.32, June 2014) and so the legislation allows you to include third party copyright material provided it's accompanied by sufficient acknowledgement and its use is considered 'fair dealing', i.e. the amount of the work being copied is reasonable and proportionate for your purposes.

Your **digital** (electronic) thesis will be made available online, and is therefore deemed to be published so you will have different responsibilities with regard to any third party copyright material you use, e.g. quotations and extracts from other people's publications, i.e. books and journals, illustrations, photographs, diagrams, maps, graphs. If you are unable to obtain permissions then you may need to consider embargoing part of your electronic thesis." Extract from the GRADskills Microsoft PowerPoint presentation, 'Copyright 101 November 2016', available on the Library's [Theses](#) webpage.

Underpinning research data or digital outputs

Q Is your thesis based on original research data/digital outputs that are subject to the requirements of the University or the funding body to deposit them?

This is a 'yes', 'no' answer. If you answer 'no', you move on to the 'Confirmation' section where you can download/save/print both your title page and declarations. If you answer 'yes', you are asked the following question:

Q Would you like to embargo your research data/digital outputs?

This is a 'yes', 'no' answer. If you answer 'no', you move onto the 'Confirmation' section where you can download/save/print both your title page and declarations. If you answer 'yes', you are asked the following questions:

Q Would you like to embargo all or part of your research data/digital outputs?

You can select either 'all' or 'part'.

Note that 'all' or 'part' does **not** include the title and description. If you choose to embargo, you will be asked separately if you would like to embargo your title and/or description of your underpinning research data/digital outputs.

If you choose 'part', you are asked to answer the following question:

Q What part(s) of your thesis would you like to embargo?

This is a free text box. You should enter the part(s) separated by commas e.g. data files 010, 065, 090, folder 1. Do not list one under another.

Permission for publication of underpinning research data or digital outputs



Useful background information about underpinning research data/digital outputs

The [University](#) and all major research funders have requirements on the deposit and sharing of research data or research digital outputs that are created or collected as part of any research project, including data or digital objects underpinning your thesis. You should, therefore, check if specific funders' requirements apply to your work and what you can do to meet them.

If your research is subject to requirements to deposit data/digital outputs then, in addition to deciding whether or not you need to request an embargo on the full text of your thesis, you would also have to decide whether or not there is a need to embargo the data/digital outputs.

As for the full text, the matter of an embargo on data or digital outputs should be discussed with your supervisor(s) as early as possible. Similarly to the full text, you can request an embargo on the grounds that publication would:

- be commercially damaging to the researcher, or to the supervisor, or the University, (for example, intellectual property rights)
- preclude future publication
- be in breach of law or ethics or data protection.

Deposit of your research data/digital output is via PURE, the institutional research information system and can be deposited **before** or **after** submission of your thesis for examination.

For advice and assistance, please, contact the Research Data Management team (research-data@st-andrews.ac.uk) or visit the [research data management website](#).

Acknowledgement of funders

Q Did you receive funding from an organisation or institution?

This is a 'yes', 'no' answer. Depending on your answer, it displays a note of what will be stated in your declarations.



Useful background information about funders

Most major research funders include in the terms and conditions of their grant awards a requirement for students to acknowledge in their theses the support received from the funder in question.

General acknowledgements

Please insert your general acknowledgements here.

Funding

Please list the names of any organisations or institutions who have funded your thesis research using the specific format and punctuation below. [An example of the formatting can also be found in Appendix II of the Guidance for submission of theses document].

This work was supported by the *insert funder name* **in full** here [grant number xxxx].

OR

This work was supported by the *Funder 1 Name* [grant number xxxx]; and the *Funder 2 Name* [grant number yyyy].

OR

This work was supported by the *Funder 1 Name* [grant number xxxx]; the *Funder 2 Name* [grant number yyyy]; and the *Funder 3 Name* [grant number zzzz].

OR

This work was supported by the *Funder Name* [grant numbers xxxx, yyyy].

Research Data/Digital Outputs access statement

Research data underpinning this thesis are available at [DOI]

OR

Digital outputs underpinning this thesis are available at [DOI]

The workflow

Student

RDM

4 months before end date: Registry invites student to complete the 'Intention to submit' task

Student completes task and specify 4 weeks window

Student receives RDM email and creates dataset record in Pure (metadata only)

Student completes 'Preparing for submission or resubmission of your thesis' task

Embargo?

Yes

Embargo approved

No

Student submits for examination

RDM team receive receipt email

RDM team email data guidance to student

RDM team check record

RDM team receive EMAIL copy of embargo letter

RDM team apply embargo to metadata (if applicable)

Student

RDM

Examination and revisions approved

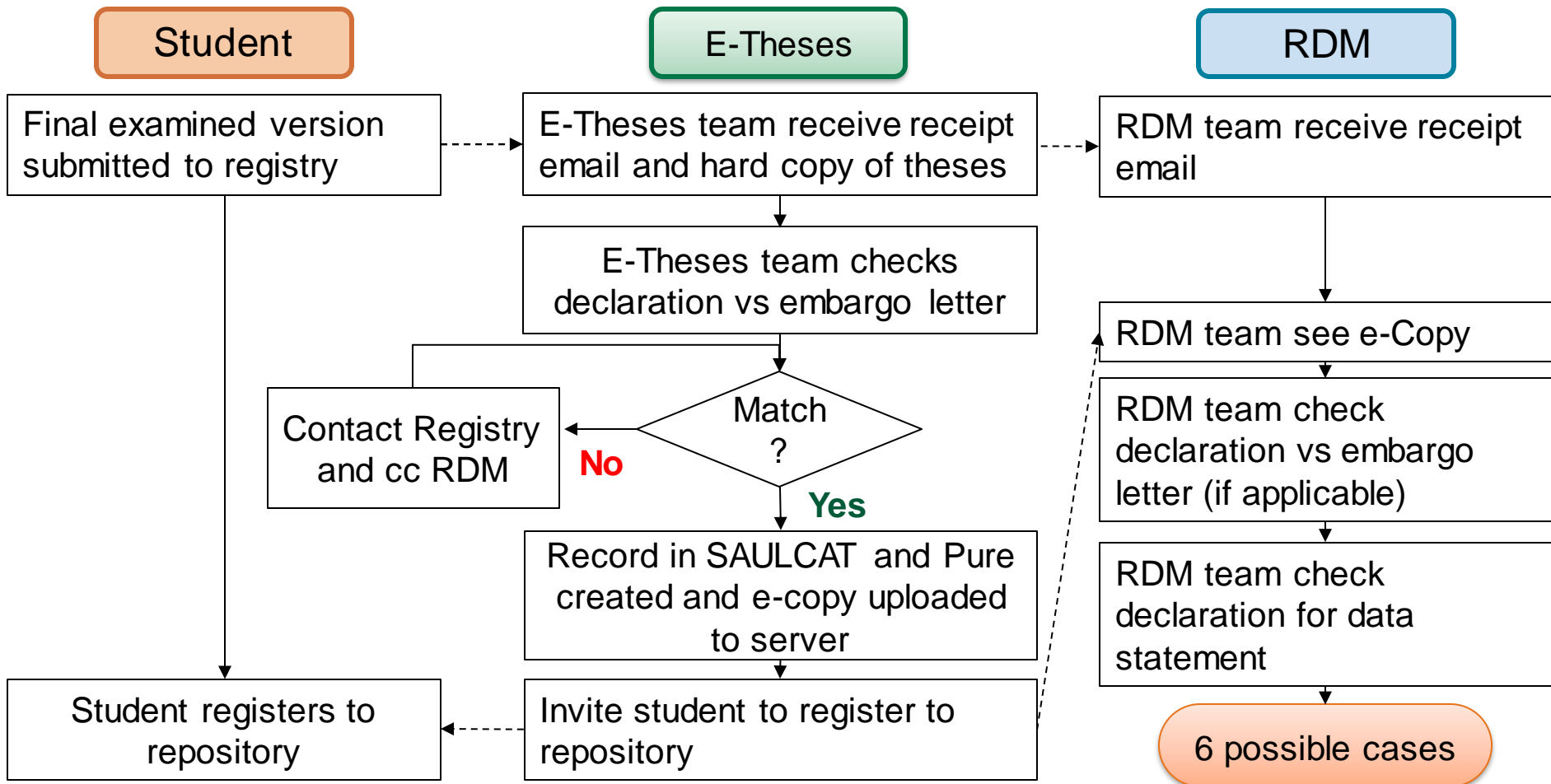
Student uploads data files in Pure and notifies RDM team

RDM team check files and apply embargo (if applicable)

Student receives DOI and adds it to full text

RDM team issue inactive DOI and notify student and supervisor

Degree awarded



6 possible cases

Case 1

- Data record in Pure
- Data files in Pure

Case 2

Secondary data

Case 3

Sensitive data

Case 4

- Data record in Pure
- NO Data files in Pure

Embargo:

- No embargo
- Files only
- Files + description
- Files + description + title

Case 5

- NO Data record in Pure
- NO Data files in Pure

Case 6

- Extra files with Full Text

Lessons learnt

Lessons learnt

- Give yourself plenty of time
- Don't overthink it – you'll never cover all the possible outcomes anyway
- More user engagement
- Have face-to-face with relevant stakeholders
- We have been very lucky to have enthusiastic colleagues

Going forward

Going forward

- Upskilling the students and the supervisors
- Upskilling ourselves
- Monitor enquiries and feedback to improve the process
 - First enquiry: highly sensitive/confidential data, how to proceed?
 - *“I do not want to be dealing with this in the four months countdown to submission.”*
 - We realized we need to change the guidance document

Going forward

- Further explore the use of Pure for metadata-only theses records
- Integrate DOIs for theses
- Integrate ORCID
- Build and refine funder acknowledgement workflows to record funder metadata
- Clarify the distinction between underpinning and supplementary data

Wish list

Wish list

- More integration between systems
- Forward thinking students
- More engagement with students and supervisors

Acknowledgements

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- Jacqui Ritchie - Registry Co-ordinator (Continuous Improvement), Academic Registry
- David Collins - Principal Library Assistant (Cataloguing), Library
- Liliana Martins e Caneco- Registry Officer
- Registry team

Thank you

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