INTERNATIONAL STANDARDS SETTING : RESEARCH INFORMATION

PRESENTATION TO OECD NESTI BUREAU ADVISORY GROUP MEETING

11TH SEPTEMBER 2017

Anna Clements, Assistant Director Library Services (Digital Research), University of St Andrews, UK
Executive for Strategy, **euroCRIS Board**
Chair, **CASRAI-UK**
Member, **Snowball Metrics Steering Committee**
orcid.org/0000-0003-2895-1310   @annakclements
Some slides courtesy Ed Simons, President euroCRIS and David Baker, Executive Director, CASRAI

AGENDA

1. Why standards needed in research information management

2. CASRAI

3. euroCRIS & CERIF

4. Opportunities & Challenges – general and UK

THE PROBLEM

Put simply, HEIs (and the researchers they represent) need to provide an increasing complexity and amount of information about their research inputs, process and outcomes to their funders

Funders and governments need this information to drive innovation, accelerate knowledge transfer and justify investment

HEIs are measured by national and global rankings which make use of metrics and methods which can lack transparency and legitimacy

INTEROPERABILITY OF RESEARCH INFORMATION IS ESSENTIAL

- To reduce burden and so improve information quality and availability; "enter once: reuse many"

- To allow comparisons of "apples to apples"

- For transparency and legitimacy

THE THREE PILLARS OF INTEROPERABILITY

1. Agreed definitions of what is being exchanged

2. Persistent Identifiers for disambiguation for people, organisations, projects, outputs

3. Common exchange format to simplify implementation and avoid vendor lock-in

ALL SHOULD BE OPENLY AVAILABLE, SUPPLIER-AGNOSTIC AND HAVE A TRANSPARENT SUSTAINABLE INCLUSIVE GOVERNANCE MODEL

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CASRAI : HOW IT WORKS

- Non profit membership organisation : HEIs, research funders, non profit association partners, solution-provider partners

- Canadian, UK and EU Chapters : Chapter Steering Committee Chair reports to CASRAI Board

- https://casrai.org/about   &   https://forum.casrai.org/

- Annual work cycles:
  - Open Call -> Working Groups -> Open Review -> Dictionary (may require >1 cycle)
    http://casrai.org/opencall17
    https://forum.casrai.org/t/2017-standards-open-review-now-closed/378

CASRAI : STANDARDS IN ACTION

- Academic CV – full and abridged versions [templates/controlled vocabularies]
  - http://dictionary.casrai.org/CV_-_Full_Academic   ORCID, ScienCV, Canada, Portugal; EU planning updates

- Contributor Terms [classification]
  - http://dictionary.casrai.org/Contributor_Roles know as CRediT

  PloS http://blogs.plos.org/plos/2016/07/author-credit-plos-and-credit-update/, Aries Systems, NISO, more publishers in progress

- Peer Review [templates/controlled vocabularies]
  - https://members.orcid.org/api/workflow/peer-review ORCID, many Publishers unofficially
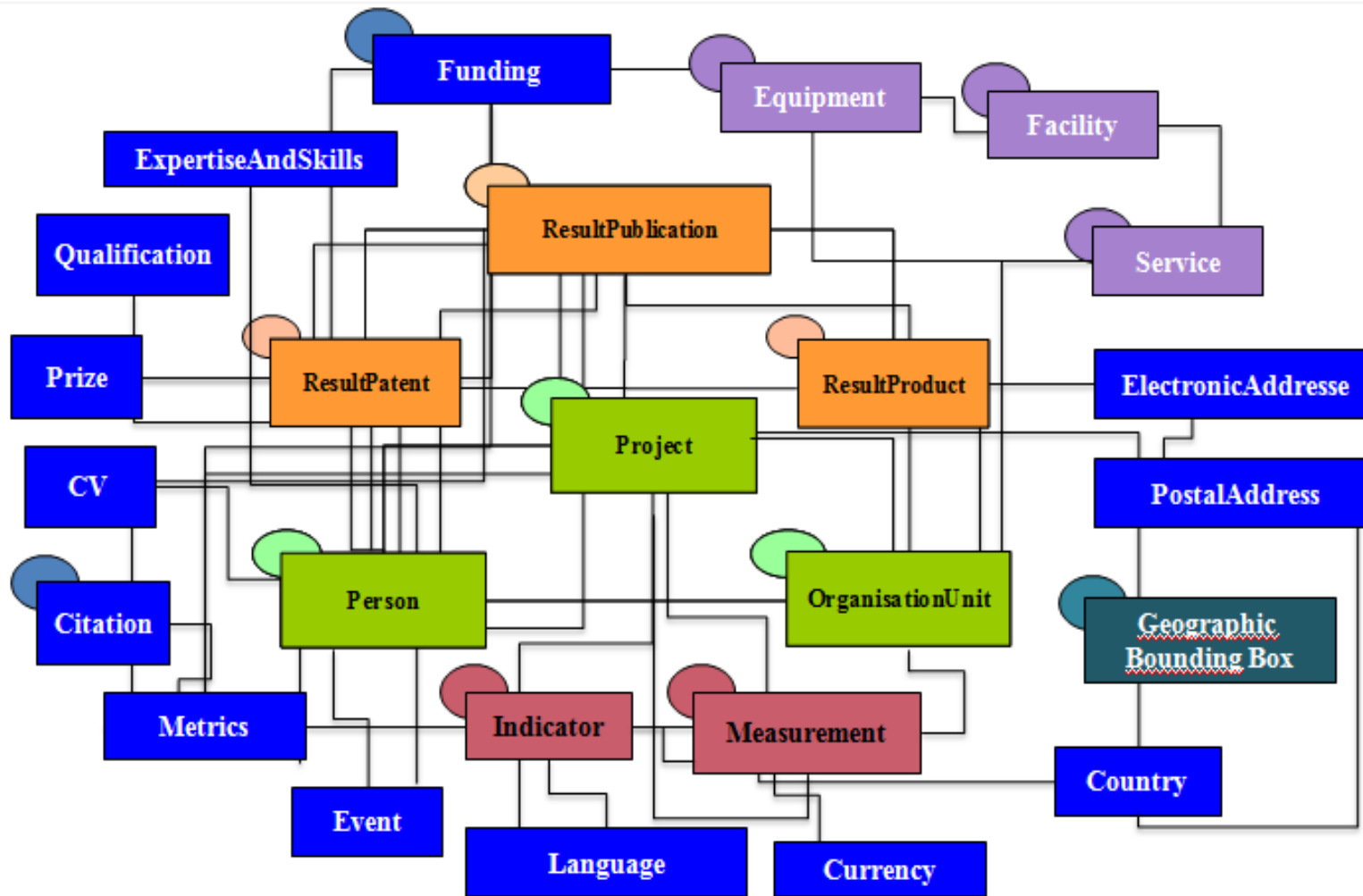
CASRAI : WORK IN PROGRESS

- IRIDIUM – research data glossary [CA-led]

- IMPACT – template/controlled vocabularies [UK-led]

- OPEN ACCESS – glossary [UK-led]

- CAREER LEVELS – classification [UK-led includes HESA]

- NOTICE OF AWARD – template/controlled vocabularies [UK-led]

- RESEARCH CLASSIFICATION – classification [EU-led]

- RESEARCH DATA MANAGEMENT PLAN – template/s, controlled vocabularies [CA-led]

Keep up to date and get involved at https://forum.casrai.org/
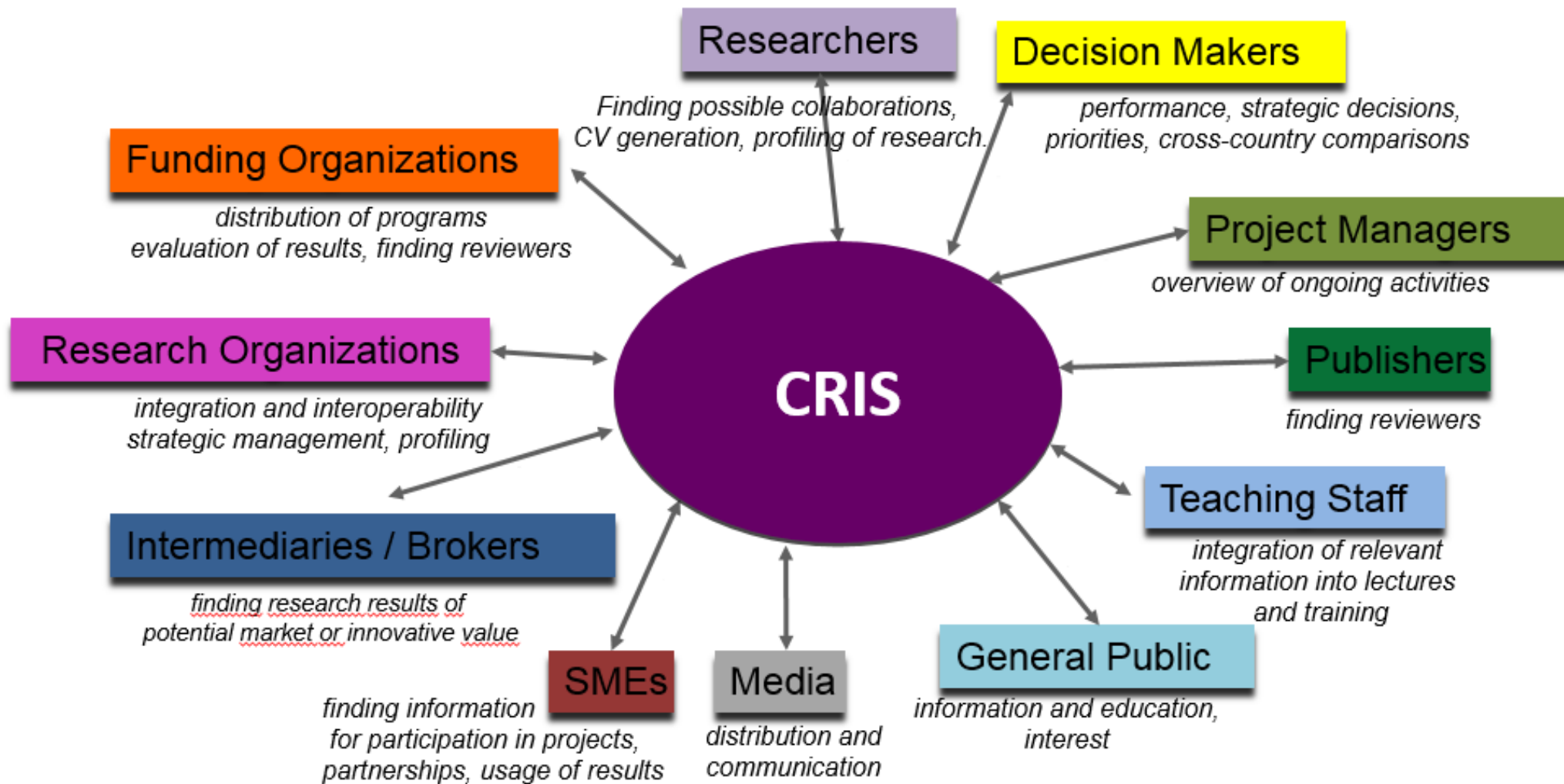
EUROCRIS & CERIF : OVERVIEW

- euroCRIS is a non profit membership organisation : HEIs & other research organisations, research funders, non profit association partners, solution-provider partners

- With over 240 institutional and personal members in 45 countries (mainly Europe, but also North and South America, ANZ, Japan and Middle East)

- euroCRIS looks after CERIF – the Common European Research Information Format (CERIF); an open standard data model for storing and exchanging research information

- Work done by Task Groups and Strategic Partnerships

- Next event : Strategic Membership Meeting, Bratislava, November 20-21

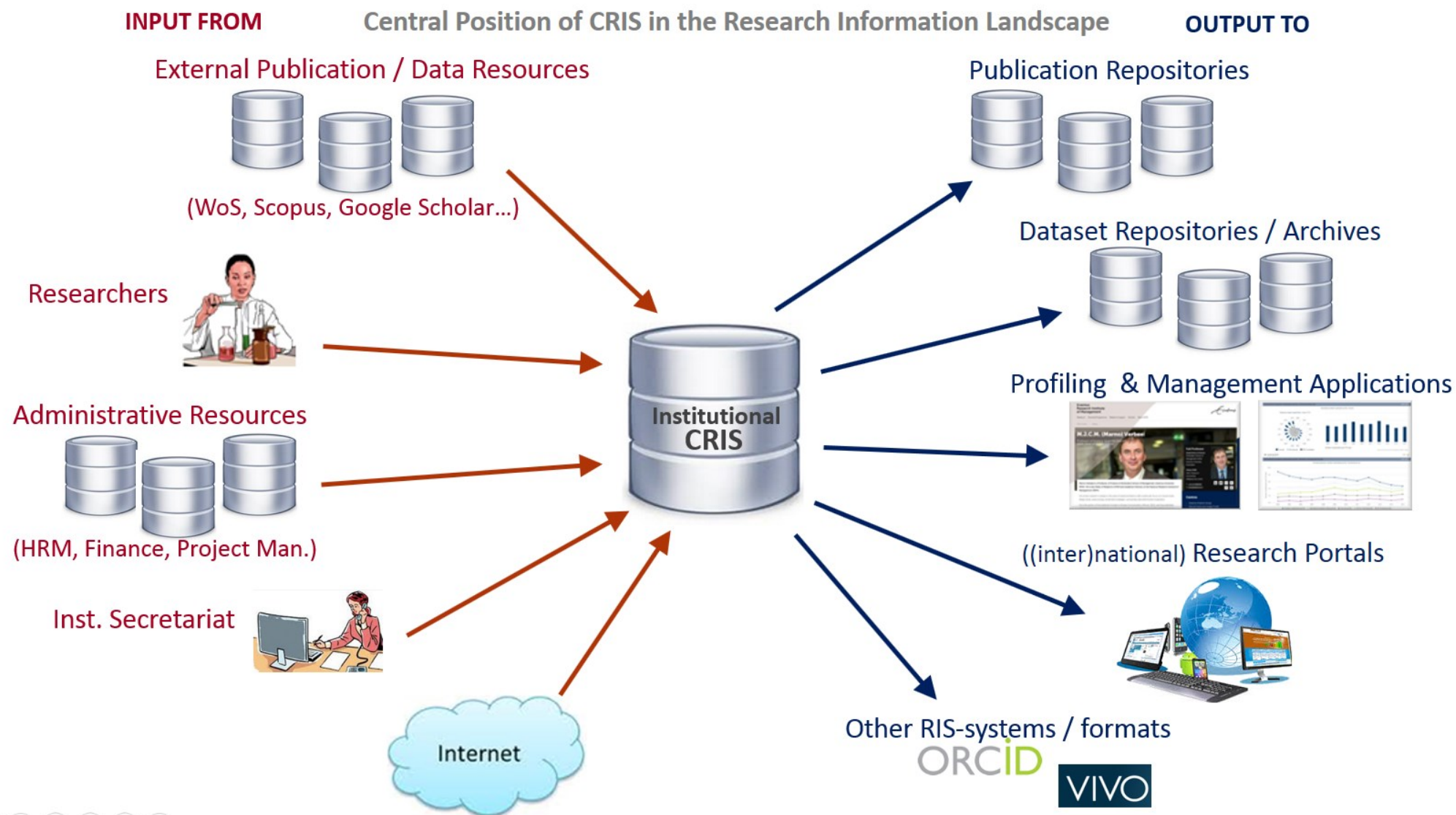http://www.eurocris.org/activities/membership-meetings/bratislava-strategic-membership-meeting-november-2017

CERIF

CRIS: Multifunctional Information Resources

euroCRIS
Current Research Information Systems

FUNCTIONALITY OF CRIS

Central Position of CRIS in the Research Information Landscape

INPUT FROM

External Publication / Data Resources

(WoS, Scopus, Google Scholar...)

Researchers

Administrative Resources

(HRM, Finance, Project Man.)

Inst. Secretariat

Internet

Institutional CRIS

OUTPUT TO

Publication Repositories

Dataset Repositories / Archives

Profiling & Management Applications

((inter)national) Research Portals

Other RIS-systems / formats
ORCID VIVO

CRIS: Multifunctional Information Resources

euroCRIS
Current Research Information Systems

ADOPTION OF CRIS (OR RIM) SYSTEMS

- National Systems, include
    - Norway, Netherlands, Portugal, Sweden, Slovakia, Czech Republic, Slovenia

- Research Organisations, include
    - UK > 50% (and > 90% in terms of research publications) – mainly commercial Pure, Symplectic Elements or Converis
    - Italy > 60 use dSpace-CRIS based IRIS system from CINECA
    - NL recently moved to commercial systems, mainly Pure; Denmark all use Pure
    - Increasingly US, ANZ organisations are adopting RIM/CRIS

- UPCOMING International survey organised by OCLC and euroCRIS on RIM adoption

CERIF COMPLIANCE

- Some systems are fully compliant e.g. PTCRIS in Portugal and SK CRIS in Slovakia,   others have implemented CERIF-XML for interoperating between systems e.g. Pure, dSpace-CRIS

- euroCRIS strategic partners e.g. OpenAire and ORCID are implementing CERIF

- Jisc (in UK) are CERIFying their Research Data Shared Service

- Netherlands P-O-P project exchange national funders NWO/KNAW & HEIs using CERIF-XML

- Germany is mapping their Research Core Dataset to CERIF

- Snowball Metrics working with both CASRAI and euroCRIS

OPPORTUNITIES/CHALLENGES

- Standards/interoperability seen as a 'technical or IT problem' not a business problem
  - Need leadership from the right senior managers – they need to know cost of *not doing this*

- Hits individual HEIs and their researchers hardest BUT it is a sector-wide problem
  - Need governments to understand total cost of *lack of interoperability* across entire sector rather than separate siloed stakeholder 'solutions'

- Membership-based non profit organisations are expertise-rich BUT cash/time poor
  - Vendors & Funders are key – need to implement according to Science Europe Principles
  - ORCID is a fine example of this working - it has been/is being resourced

OPPORTUNITIES/CHALLENGES - UK

- ***Researchfish*** : commercial company
  Annual collection of research outputs and outcomes from RCUK & Health Charity funded resesrch; no open standards (yet!) but question set is freely available and is an ongoing and successful interoperability pilot and working group involving HEIs and funders.

- *HESA* : sector-owned
  Annual collections of student, staff, financial, business interaction, dest. leavers, estates data; research information includes research income, research students, knowledge engagement and transfer activities.

- *REF* : public funding bodies (HEFCE, SFC, HEFCW & DELNI)
  Research assessment exercise held every 7 years – tied to QR money (£1.6 billion) and reputation via league tables; VERY important to HEIs.   Data on researchers, publications/outputs, impact & environment

- High-level Research Information Management Co-ordination Group with members from JISC, RCUK/UKRI, HEFCE, ARMA, HESA, WELLCOME – open standards key element CASRAI, euroCRIS/CERIF, ORCID

THANK YOU

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