USING THE **DSA** TO BENCHMARK AND GUIDE TRUST WITHIN **CESSDA**

HERVÉ
L'HOURS

PRESERVATION PLANNING MANAGER
UK DATA ARCHIVE
UNIVERSITY OF ESSEX

UK•DATA
ARCHIVE

IASSIST 2014
5 June 2014

We acquire, curate and provide access to the UK's largest collection of social and economic data.

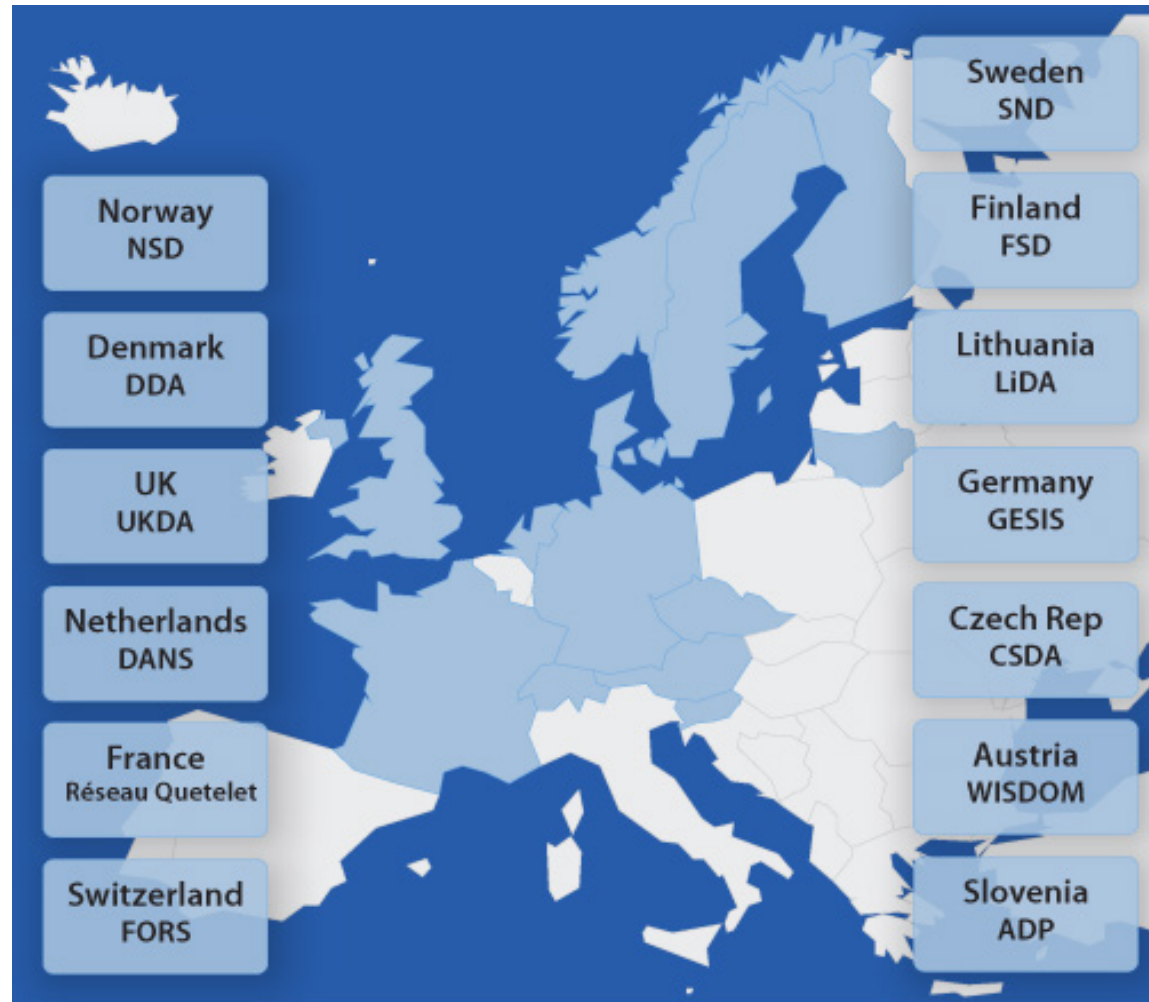UK • DATA ARCHIVE

WE CURATE

WE DELIVER

THE UK DATA **SERVICE**

- quality social research data

- a unified point of access to data from ESDS, Census Programme, Secure Data Service and others

UK Data Service

CESSDA

CESSDA

- European infrastructure

- informal organisation since 1976

- now a legal entity hosted in Bergen, Norway

- 13 members:

  Austria, Czech Republic, Denmark, Finland, France, Germany, Lithuania, Netherlands, Norway, Slovenia, Sweden, Switzerland, United Kingdom

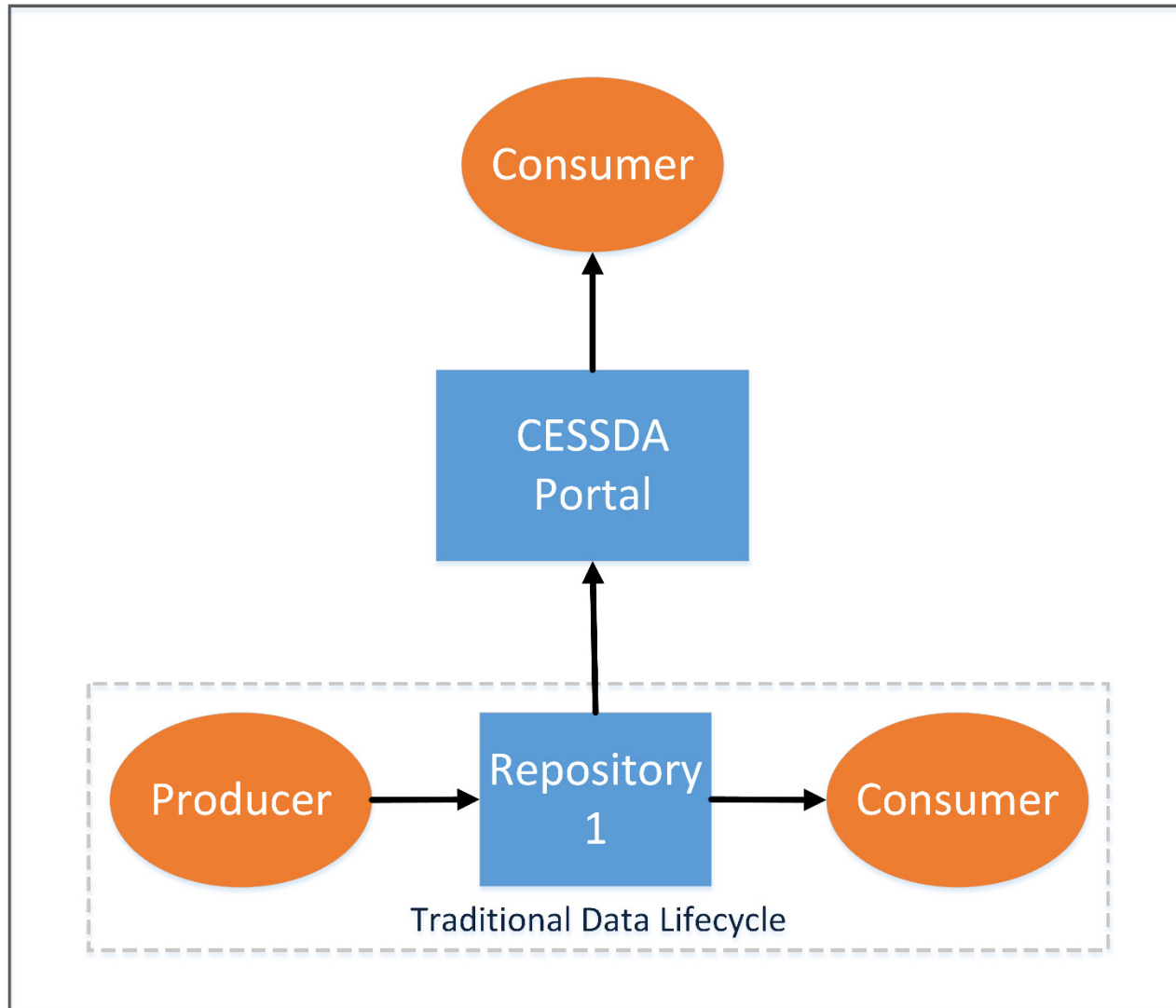- each with a designated Service Provider (SP)

CESSDA

Immediate goals of the process were to:

- address alignment with **CESSDA Statutes**

- consider the roles of:

  - **trust**

  - **Trusted Digital Repositories** status

CESSDA: Trust Relationships

Producer → Repository 1 → Consumer

Traditional Data Lifecycle
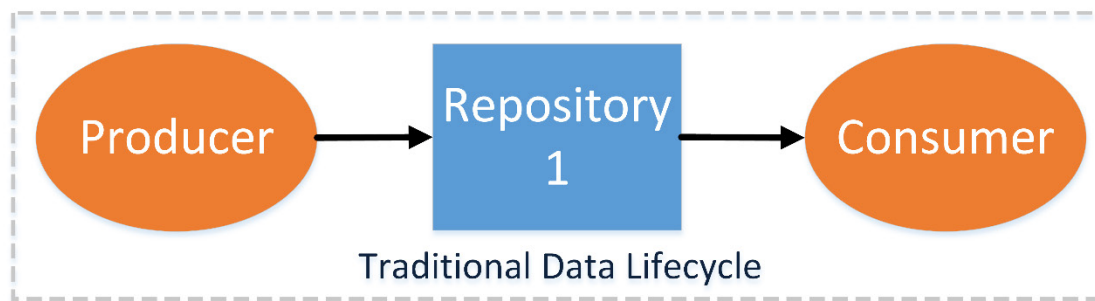
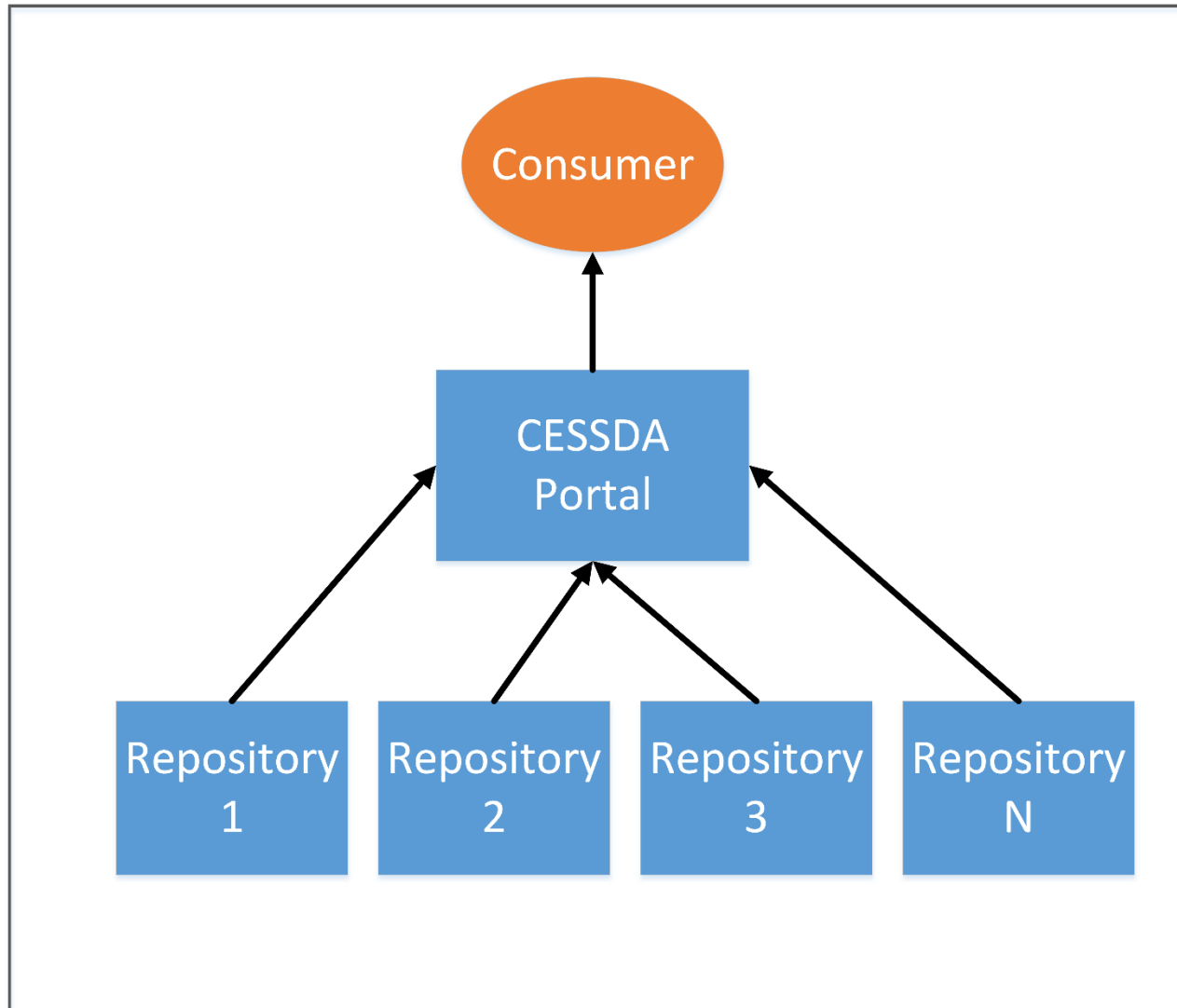# CESSDA: Trust Relationships

CESSDA: Trust Relationships

CESSDA: **OBLIGATIONS**

Statutes signed by all Service Providers:

- Data Documentation Initiative (DDI) metadata compliance

- common single sign-on user authentication system

- harvesting of all resource discovery metadata

- data downloadable through common data gateways;

- maintain local language(s) within the multi-lingual thesaurus

CESSDA: **OBLIGATIONS**

Statutes signed by all Service Providers:

- OAIS compliance and trusted digital repository status

- cross-national data harmonisation activities

- cross-national question bank

- mentor support for:

    - Associate Members

    - countries with immature and fragile national infrastructures

- Common Data Access and Dissemination Policy

TRUSTED DIGITAL REPOSITORY STATUS

What is a TDR?

- mission to provide reliable, long-term access to managed digital resources to its designated community, now and into the future

- constant monitoring, planning, and maintenance

- understand threats to and risks within its systems

- regular cycle of audit and/or certification

AUDIT AND CERTIFICATION OF TRUSTED DIGITAL REPOSITORIES

Data Seal of Approval DSA

- international community consortium

- 16 guidelines, trust-based self-assessment and peer-review

DIN 31644: Criteria for Trustworthy Digital Archives

- NESTOR German Competence Network for Digital Preservation (Working Group on Certification)

- 34 criteria

ISO 16363: Audit and Certification of Trustworthy Digital Repositories

- successor to RAC/TRAC

- over 100 metrics, full external audit process

THE CERTIFICATION FRAMEWORK

Memorandum of Understanding for a Three-tiered Framework

➤ **Formal certification:** DSA + full external audit and certification based on ISO 16363* or DIN 31644**

➤ **Extended certification:** DSA + structured, externally reviewed and publicly available self-audit based on ISO 16363* or DIN 31644**

➤ **Basic certification:** Data Seal of Approval (DSA)

Information and Documentation - Criteria for Trustworthy Digital Archives

http://www.trusteddigitalrepository.eu

*ISO 16363 - Audit and Certification of Trustworthy Digital Repositories
**DIN 31644 - Information and Documentation - Criteria for Trustworthy Digital Archives

DSA **FOUNDATIONS**

- **Trust: "***Reliance on and confidence in the truth, worth, reliability of a person or thing"*

- **Trust is transitive**

- **Transparency:** *"Minimum degree of disclosure to which agreements, dealings, practices, and transactions are open to all for verification"*

- **Community:** The Data Seal of Approval was established by a number of institutions committed to the long-term archiving of data. By assigning the seal, the DSA **community** seeks to guarantee the durability of the data concerned, but also to promote the goal of durable archiving in general.

DSA **OBJECTIVES**

The Data Seal of Approval is granted to repositories that are committed to archiving and providing access to data in a sustainable way.

- **Data Producers**

  - *Assurance* of reliable data Storage

- **Funding Bodies**

  - *Confidence* that data is available for reuse

- **Data Consumers**

  - *Enables* assessment of repositories

DSA **PRINCIPLES**

The data are:

- available on the Internet

- accessible

  - while taking into account relevant legislation with regard to personal information and intellectual property of the data.

- usable (file formats)

- reliable

- citable (can be referred to)

Compliance Levels

Level	Compliance Level Definition	Requirements
0	Not Applicable	Provide an explanation
1	We have not considered this yet	Provide an explanation
2	We have a theoretical concept	Provide a URL for the initiation document.
3	We are in the implementation phase.	Provide a URL for the definition document.
4	This guideline has been fully implemented for the needs of our repository	Provide a URL for the definition document.

DSA: **16 GUIDELINES**

Data producers

- deposit quality and compliance

- recommended formats

- requested metadata

DSA: **16 GUIDELINES**

Data repositories

- explicit mission
- legal/contract compliance
- data storage processes
- preservation plan
- explicit data lifecycle workflows
- responsibility for access

DSA: **16 GUIDELINES**

Data repositories

- discovery, use and reference

- object/metadata integrity

- object/metadata authenticity

- technical infrastructure standards

DSA: **16 GUIDELINES**

Data consumers

- compliance with access criteria

- proper use and exchange of information

- usage licence compliance

CESSDA TRUST PROCESS: **METHODOLOGY**

- mapping obligations to DSA Guidelines (where possible)
- initial workshop
  - understanding of trust requirements and the DSA
- conformity assessment
  - self-assessment, peer review and gap analysis
- follow-on workshop:
  - results of process
  - consider next actions for obligations and TDR status

CESSDA TRUST PROCESS: **METHODOLOGY**

Informal application of the DSA process, no formal DSA Board involvement and no DSA assigned

- Service Providers conduct self-assessment

- anonymous peer-review

- analysis and repeat grading of assessments by 'Expert Group'

    Mari Kleemola, FSD

    Herve L'Hours, UK Data Service

    Natascha Schumann, GESIS

    Heiko Tjalsma, DANS

- Oversight from Matthew Woollard, Director, UK Data Archive and UK Data Service

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CESSDA TRUST PROCESS: **METHODOLOGY**

- generic feedback provided to all Service Providers

- gap analysis of trust requirements

- all anonymous

  - though including feedback to DSA Board

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CESSDA TRUST PROCESS: **METHODOLOGY**

A (partial) success:

- DSA a valuable basis for open information sharing and discussion but…

- challenges when integrating granular, specific obligation into higher level DSA Guidelines

- discussion naturally divided between the two areas

- likely to become less of an issue as service providers become more familiar with the DSA

CESSDA TRUST PROCESS: **OUTCOMES**

- useful (but separate) discussion on meeting obligations

- good overall conformance across CESSDA

- issues with providing evidence for internal repository processes

  - we all focus on the externally facing (producer/consumer) evidence

CESSDA TRUST PROCESS: **ACTIONS**

DSA as a basis for future CESSDA Trust status:

- aligned CESSDA evidence (easier to maintain and compare)
- initial confidentiality within CESSDA
- a good basis for communications around trust issues for members

Issues to consider:

- adopting a version
- changes to the criteria beyond CESSDA control
- staggered adoption
- influencing the criteria

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CESSDA TRUST PROCESS: **ACTIONS**

Common approach to:

- designated community

- formal identification of depositors

- acceptable formats and format risk

- alignment with DDI and deposit metadata

- mission statements

- registry of legislation

- licence harmonisation

- common data storage descriptions

- versioning

- lifecycle/business process descriptions

- critical preservation events to be captured

Communities of Trust
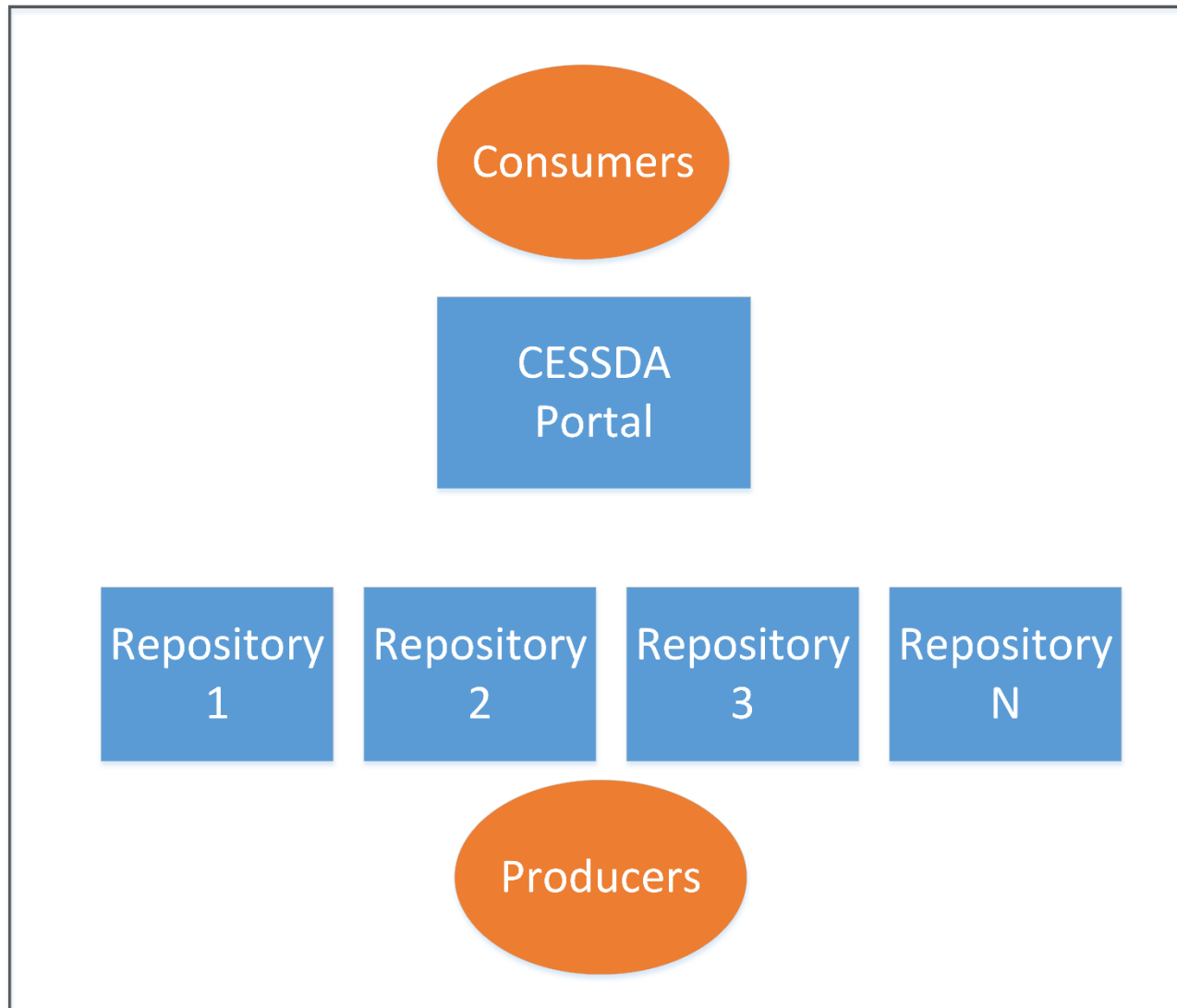
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