PERSISTENT IDENTIFIERS AT THE UK DATA ARCHIVE

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THEORY INTO PRACTICE

- Meanings of words
  - Persistence must mean enduring
  - Identifiers must be unique
  - Digital Object should be clearly defined to ensure appropriate granularity.

CURRENT SITUATION

- Test British Library/DataCite's DOI allocator
- Building web services to align with above
- Agree strategy for phased implementation

WHY NOT READY YET?

- Archive “data collections” are not digital objects
- Desire to resolve inconsistent use of version/edition
  - Ensure they’re machine-actionable and not just human-mediated
- Integrate processes with digital preservation activities
  - Incremental changes are machine-controlled
- Current infrastructure / work flows
- Desire to “get it right” first time

VERSIONS AND EDITIONS

- Ugly terminology (compare OAIS AIP Edition/Version) with library science definition.)
- “Archive” / “library” perception that citation must be perfect.
- Social science users want most recent (95%) for research and older for verification (5%)
- Approx 15% of all data collections altered within first year after first publication

USER-CENTRED IMPACT

- Desire to move from “archive-practice” centred approach to user-centered approach.
- Impact is defined in terms of effect on users.

  It covers (amongst other things):
  - Changes to variables/data
  - Changes to documentation
  - Regrossing of a data series
  - ‘Waves’ in series

EXAMPLES

- Low impact
  - Correction of spelling in variable labels
  - Small changes in variable labels
  - Removal of (erroneously supplied) admin variables
  - Correction of spelling in metadata
  - Minor changes in documentation
  - New index terms
  - Additional documentation added (non-fundamental)
  - Change in access conditions

EXAMPLES II

- High impact
  - New variable added
  - New labels/value codes added
  - Weighting variables reconstructed
  - Wrong data supplied (e.g., March not April)
  - Mis-coded data (e.g., Don't know/Refused confused)
  - Change in format (file migration)
  - Change in access conditions

RECONCEPTUALISATION

- Ingest to be understood as an ongoing dynamic process
- Concept of an *instance* to denote changed collection (and amenable to machine actions such as comparing checksums)
  - Internal change during ingest process (unreleased)

    => new internal instance
  - Low impact change (released)

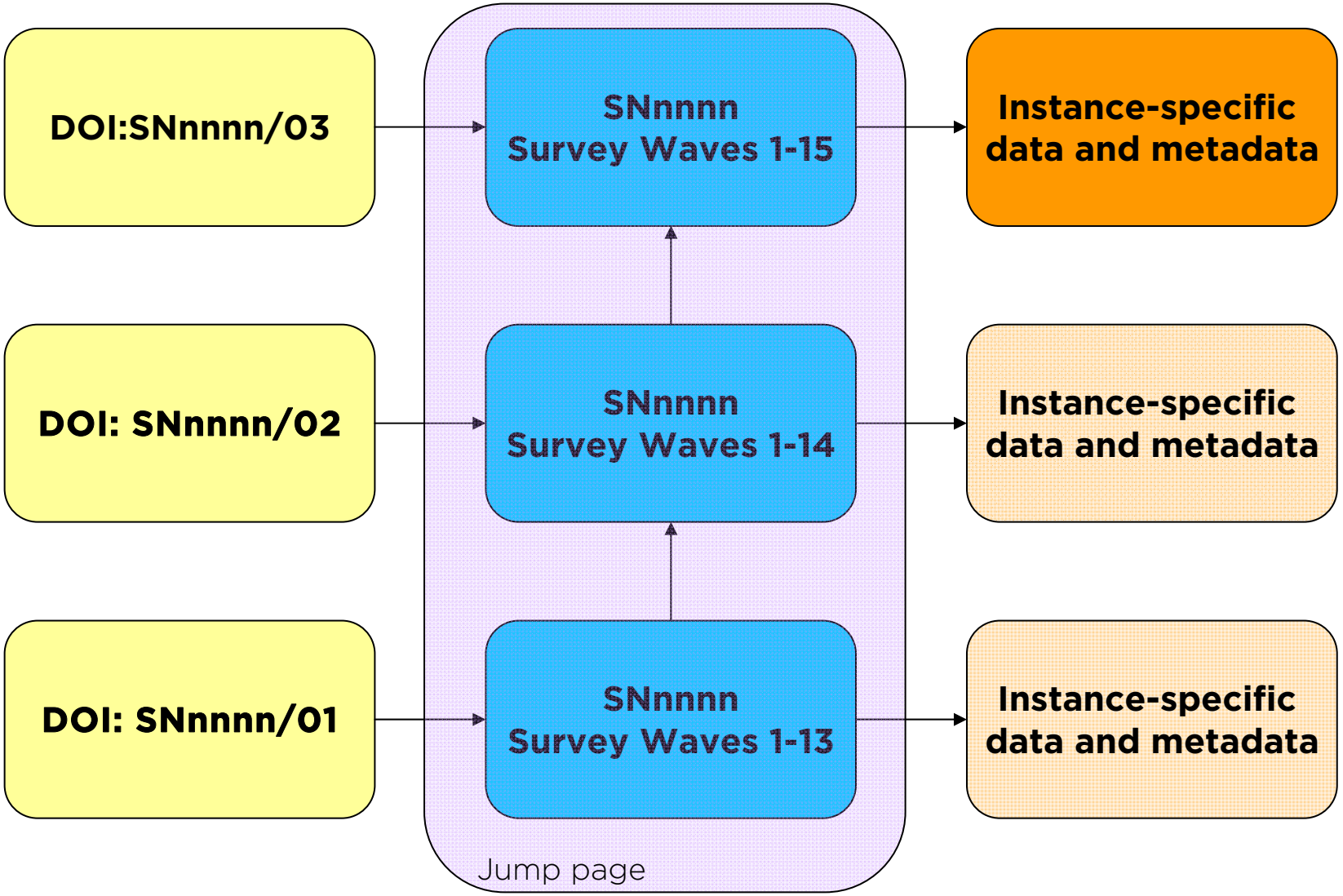
    => new external instance with unchanged DOI
  - High impact change (released)

    => new external instance and new DOI

SOLUTION?

- Original solution
  - Phase 1: DOI allocated to core metadata (title, etc.) relating to a data collection
  - Problem: even titles can change
- New solution
  - Phase 1: DOI allocated to metadata relating to *each external* instance of a data collection
    - DOIs resolve to "jump" page pointing to all external instances (and indication of internal instances?)
    - New DOI = High Impact change, with explicit logging but we could also update an existing DOI with low-impact change information
  - Phase 2: All instance-specific data made available over time (where allowed)

DIAGRAMATICALLY...



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