

# User Acceptance Testing of version 1.0 of Backcasting Facility

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# Goals

- To test functionality in version 1.0 of facility and through this, familiarise oneself with the overall backcasting process and methodology.
- Provide us feedback on how facility can be improved.
- Identify any 'subject matter area'-specific functions/special handling that was missed in the initial design. This can be implemented in the near future.
- Identify your datasets to backcast, requirements: e.g. constraints on backcast lengths and/or how much revision you can tolerate in previously published period-to-period movements due to backcasting.

# Goals contd..

- Overall, this will provide ideal preparation for the real thing:
  - get the input configuration files correct now (once and for all) for your own datasets and set up any necessary infrastructure.
  - prepare team dynamics / processing infrastructure: who in your section will back up datasets on ABSDB, prepare input configuration files, execute the facility and analyse/interpret results, liaise with time series (TSA), data management (IMD) and BSM personnel?
- Tell us whether you will need further training, i.e. one-to-one sit down demonstrations.

# Purpose & Scope

- It is assumed your collection(s) will fall under the ANZSIC'06 scheme, or, have some change in scope (e.g. QBIS in Mar '07).
- Following impact assessment, these subject matter areas may need to backcast on the new ANZSIC'06 basis.
- Focus is on "sub-annual" series and those not rederived from unit-records.
  - NATIONAL ACCOUNTS (NAB)
  - LABOUR PRICE INDEX (LPI) - *methodology different (no smoothing, but level shifting)*
  - LABOUR EMPLOYER SURVEYS BSC (LES: AWE, JVS, EEH) - *recreated from unit-level records?*
  - LABOUR FORCE SURVEYS (LFS) - *recreated from new unit-level records*
  - RETAIL TRADE
  - ANNUAL ECONOMY WIDE STATISTICS (AEWS) - *annuals: no b'casting but bridging*
  - QUARTERLY ECONOMY WIDE SURVEYS (QEWS)
  - SERVICE INDUSTRIES BSC (SI BSC) - *annuals: no b'casting but bridging*
  - PRODUCER PRICE INDEXES (PPI) - *methodology different (no smoothing, but level shifting)*
  - INFORMATION TECHNOLOGY (I & T)
  - AGRICULTURE (Ag) - *some annuals? : no b'casting but bridging*
  - ECONOMIC, EMPLOYMENT AND REGIONAL STATISTICS (EERS) - *some annuals? : no b'casting*
  - STATE AND TERRITORY STATISTICAL SERVICES (STSS)
  - NATIONAL CENTRE FOR CULTURE AND RECREATION STATS (NCCRS)
  - BALANCE OF PAYMENTS AND INTERNAL TRADE (BOP)

# Suggested Testing Strategy

## Steps:

1. Decide if you really need to backcast (under ANZSIC06 or otherwise) using the backcast facility. I.e. if have sub-annual series in collection and not using unit-record editing / recategorisation approach.
  - Risky to wait for final impact assessment to find out.
2. use a simple test dataset for initial familiarisation (same for everyone)
3. use a dataset from your own collection (obviously one that may need backcasting in future)

# 1. Simple Example

- As a warm-up, you can practice on the 'Balance of Payments' dataset used in the demonstration earlier, given the "real" configuration file from section 6 in manual.
- With this, you can:
  - check that you can actually run the facility in your environment with all the necessary access/privileges to the ABSDB (test DB: UAC4).
  - experiment on changing thresholds / impacts in the configuration file to get a feel for how the backcast length selection methods work.
  - get familiarised with the methodology and diagnostic outputs.
  - also, the analysis and interpretation of output diagnostics from this example is very typical of a backcasting run you may encounter in future. An analysis of this dataset was outlined in section 9 of the manual.
- You will not be able to overwrite originals on the ABSDB with new backcasted estimates (i.e. write protected). Can only perform "virtual backcasting" runs where diagnostics are generated.

## 2. Testing on your own data

Sooner or later, this will need to be done, so best to get the infrastructure and all necessary inputs set up now.

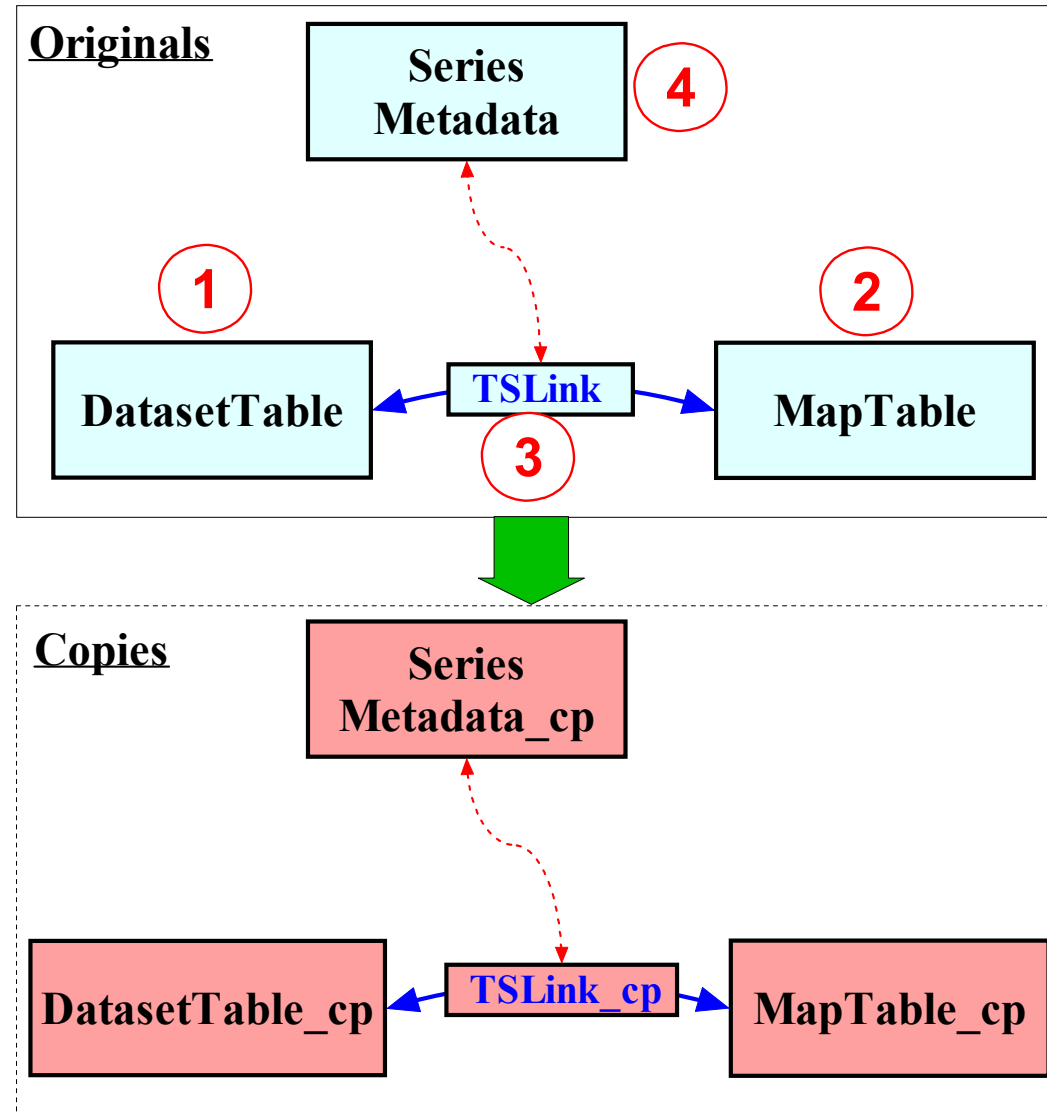
This will involve:

- identifying which datasets to backcast and any requirements/constraints imposed by ANZSIC'06 or other.
  - creating physically isolated back-up data sets and TSLinks using ABSIW tools
  - assembling input configuration file and researching necessary info.
  - executing the facility and analysing results (e.g. sections 7 and 9 of manual).
  - identifying problems specific to your needs.
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- Strongly recommend all testing to be done in the user acceptance test database (UAC4). You don't want to corrupt existing production datasets in the 'user' database!

# Backing up your data

From section 5 of user-manual:

- Backup copies of items 1, 2 and 3 in test DB can be created using tools on the ABS Information Warehouse (ABSIW). For FAME DBs, can be done using FAME scripts.
- For SEASABS metadata backups (item 4), you will need to contact TSA (contacts in manual) and provide them with the location of your data: i.e. "Owner Group" and new "TSLink" name.
- Each subject matter area has its own data management area (e.g. ESG and PSG) with the relevant expertise to perform these copies. Contact us if there's difficulty.



# Input Configuration File

- You can use the example template provided in section 6 of the user-manual.
- This will need to be tailored to your needs and will involve some prior research on your collection (if available), e.g:
  - expected impacts, use real ones if you have them, or, use pretend impacts of a reasonable magnitude;
  - impact date(s);
  - thresholds on how much movement revision you can tolerate due to backcasting (see section 3.5 of user-manual for rules of thumb);
  - get a procedure in place for transferring original series values at impact date(s) from ABSDB into the configuration file (e.g. downloaded via a spreadsheet from ABSDB then converted into the right format);
  - settling on any new series names and production group names.

# Further Tidbits..

- You can zip up the contents of your "BackcastOutput" directory generated by the facility and send to TSA if you have difficulty interpreting results.
- Be prepared to restore original values in your dataset(s) on ABSDB if you perform an end-to-end test, i.e. if you decide to perform the 'actual' b'casting and overwrite (and potentially corrupt!) them with b'casted estimates.

```
You may quit the application now or
you may continue for actual backcasting.

 1 -- to quit the program.
 2 -- to run actual backcasting.
>2

Warning: you are going to run actual backcasting.
Have you backed-up the SEASABS Group?

 1 -- No <Quit the program, I need to do back-up>
 2 -- Yes <Run actual backcasting, I have done back-up>
>2

Please select a backcast length for actual backcasting.

 1 -- whole span.
 2 -- minimum common length.
 3 -- user defined length.
 4 -- minimum group normalised delta length.
 5 -- infinite length.
 0 -- Quit.
>1_
```

# Timeline for Testing?

- We appreciate you getting back to us with feedback on testing status, deficiencies in software useability and training needs by end of December 2006.
- Recall that the goal here is to wrap-up version 1.0 of the facility with further suggested improvements going into version 2.0.
- We realise different areas have different schedules on the 'backcasting timeline' (below) but you'll certainly be using version 2.0 of the facility when it's time to perform your "real" backcasting. So, we value your feedback!

