

# The Input

Optimising the Quality of the  
Co-Ordinate References

# Background

## Improvements in collection geography

- automated system using GIS (Arc/Info)
- digital maps - 10k raster and large scale land-line
- digital boundaries - boundary-line and ED-line
- Address-Point (AP) - October 1998 release supplemented by update information from LAs

# Background

continued)

- Customised ED maps
- Addresses pre-listed in Enumerator's books
- Enumerators update books during enumeration by adding new households/addresses

# Processing the data

## Preparing the Geography database

- Update Address-Point data with postcode changes
- Compile file of Address-Point updates
- Update grid references
- Construct definitive postcode table

# Processing the data

- Processing utilises the Geography database to obtain postcodes, by
  - 1 matching on formid
  - 2 matching on last two characters of postcode if unique within the ED
  - 3 matching on complete postcode
  - 4 obtaining postcode from address details via 'Matchcode' and checking if valid for the ED

# Processing the data

- Any postcodes obtained other than by matching on formid are referred to Geography
- Geography check that the postcode is correct and valid for the ED
- The check is carried out using a mixture of automated and manual methods

# Processing the data

- Automatic checking procedures
  - compare processed postcode with geography database (AP and AP update tables)
  - match address elements and confirm postcode is valid for the ED
  - if match found the grid reference is copied to output table
  - if no match is found the record is actioned manually

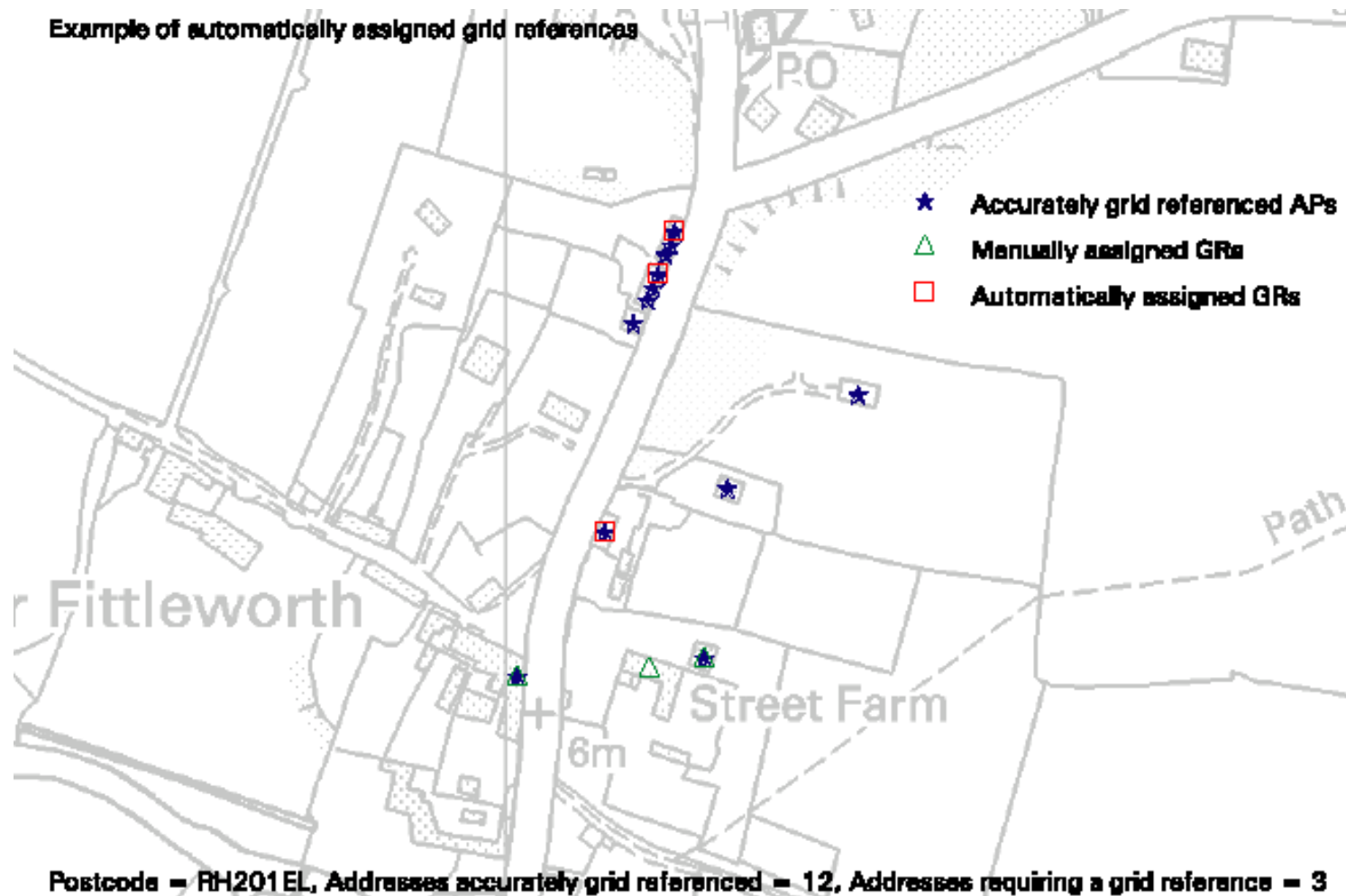
# Processing the data

- Manual checking procedures
  - confirm postcode using Royal Mail Address Manager
  - find the address on Land-Line map and assign grid reference
  - often an AP grid reference is used because incomplete address details have prevented an automatic match earlier

# Processing the data

- Geography systems are working well but the sheer number of queries mean that automatic match rates need to be improved
  - if the majority of addresses within a postcode are accurately grid referenced then these are used and assigned 'randomly' to the query addresses
  - if the majority of addresses are not accurately grid referenced then they are still manually assigned
  - strict quality control ensures that undue bias is not introduced

# Processing the data



# Processing the data

## Summary

- Geography database key to ensuring consistent and accurate postcodes and grid references used
- use of up to date large scale Ordnance Survey maps tie addresses to the real world
- the end result is every census form collected will have been assigned a valid postcode and an accurate (fit for purpose) grid reference