

# Measuring migration in a changing world



## How should migration statistics reflect the complexity of modern travel patterns?

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UNECE-Eurostat work session on migration statistics

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Identifying the various concepts and definitions needed to produce migration statistics that meet the needs of our users is a key building block of our framework for transformation.

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### Concepts

What concepts do we need to measure, and what definitions support these?

e.g UK Migration



### Data

What data can we use to answer users' questions?

- Administrative
- Census
- Survey
- Big/commercial/other data sources

### What are the user needs?

How is the population changing, including patterns of international migration?  
What impact is this having on the economy, labour markets and society?

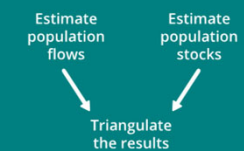
### Outputs

What outputs do we need to produce?

- Population and international migration outputs
- Migrants and migration analysis
- Population characteristics
- Demographic analysis
- Families and households statistics

### Methods

What methods can we use to analyse administrative data?



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# Existing concepts and definitions

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## What concepts do we measure?

Concept	Definition	
Usually resident population	UN	Resident for at least 12 months (whatever nationality) for population estimates
Long-term migrant	UN	Change country of residence for 12 months or more (intentions based)
Short-term migrant	UN	Change country of residence for 3-12 months work or study
	ONS	Also 3-12 months any reason and 1-12 months any reason
Overseas visitor	UN	Permanent resident outside of UK, visits for less than 12 months in the UK
Circular	UNECE	A repetition of migration by the same person between two or more countries

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## Limitations

- Definitions do not always fit with the complexity of people's lives
- Some definitions overlap, e.g. short-term and overseas visitors
- Application of definitions are different and therefore estimates such as long-term and short-term are not mutually exclusive

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## User feedback

We asked important questions for users on concepts and definitions, specifically:

- What additional or alternative definitions would support you in better understanding population and patterns of migration?
- How should any grouping and definitions we develop in the future interact with our existing definitions of long-term migration, short-term migration, usually resident population and overseas visitors?



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# What survey and administrative data sources are we using?

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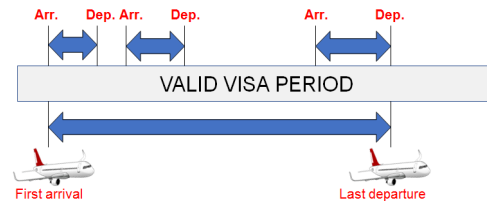
## What survey and administrative data sources are we using?

### International Passenger Survey (IPS)

Sample survey capturing the individual's intentions at the time of interview when arriving or departing the UK

### Home Office administrative data (non-EU) i.e. Exit Checks

Actual travel patterns of migrants in the UK on visas



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## How can we utilise admin data?

No single source of information gives a clear view of migration.

However, by bringing data sources together we can provide better evidence for our users, such as:

- Linkage to other admin data to explore 'activity', e.g. higher education student records
- To identify potential international immigrants using 'arrival' flags, e.g. registration to national health services

## Using administrative data to explore concepts and definitions

1. Applying the UN long-term definition
2. Alternative definitions for long-term
3. Circular patterns of movement

## What should we measure?

People's lives are complex and our statistics need to reflect this, so we plan to:

- understand how we can apply current UN definitions to administrative data sources
- explore alternative definitions that use flexibility around duration of stay using admin data sources
- undertake sensitivity analysis around current and alternative definitions

# (1) Applying the UN long-term migration definition

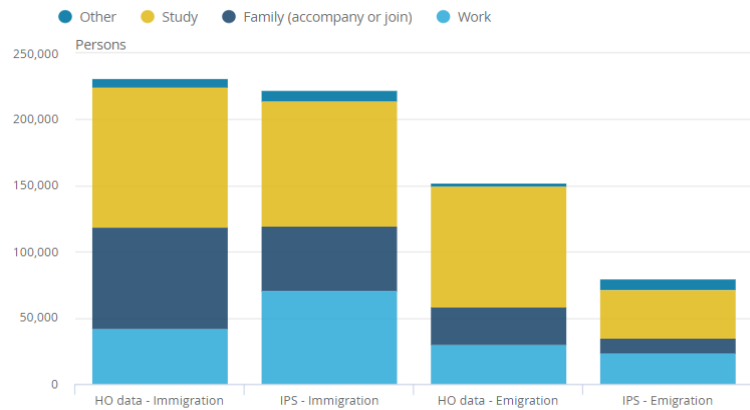
## Previous research

The method used length of stay within the UK, calculated as:

‘Number of days between first arrival and last departure within a visa period’

The number of days spent in or out of the country was then applied to the UN definitions for long- and short-term migrants.

Preliminary Home Office (HO) administrative data results compared with International Passenger Survey (IPS) data – non-EU long-term migration, UK, 2016 to 2017

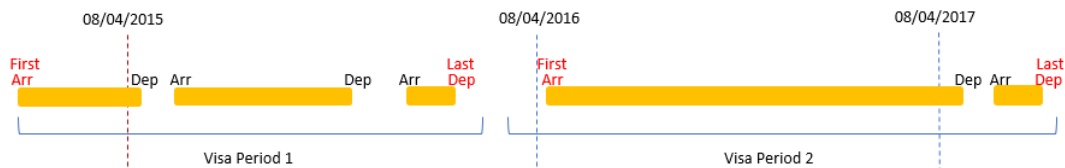


Source: Office for National Statistics analysis of Home Office administrative data and International Passenger Survey (IPS) data

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## Refining this method

- Using more Home Office administrative data, we have refined the method of defining visa periods within the visits data. Then calculated the number of days between first arrival and last departure as in the previous method



- Also considered the length of stay during previous visa period (for immigration) and next visa period (for emigration)

Further analysis of this refined method is currently being carried out and will be published later this year.

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# (2) Alternative definitions for international migration

## Notes:

- These alternative definitions look at time in and out of the country (not visa condition or status) using Home Office administrative data
- They do not replace existing UN definitions

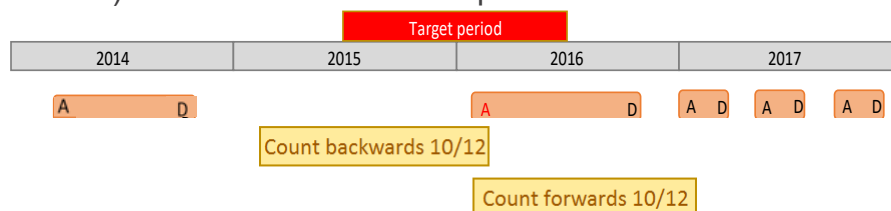
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## Aggregated travel events

This method assesses how long someone has been in the UK by counting days spent in and out the country within a given reference period.

At present, we use a long-term definition of 10 months in a 12-month period.

For example, for immigration we look forwards and backwards a set amount of time (12 months) from each arrival and departure date:



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## Six months and a day

This method again assesses how many days an individual has been present in the UK but instead currently uses a threshold of 'six months and a day' to determine long-term migration:

- An individual is defined as a long-term immigrant if they have stayed in the country for more than 6 months and a day (183 days) within a 12-month period. With the reverse for emigration.
- To ensure the time period is spread over the year, we look to only include those who are present in the UK during the last two months of their 12-month period.

## Comparisons of methods

	First Arrival / Last Departure	Aggregated Travel Events	6 Months and a Day
Uses UN standard definition	✓	✗	✗
Filters out EU nationals	✓	✓	✓
Removes those on certain visas	✓	✗	✗
Measures actual travel patterns	✗	✓	✓
Visa information informs length of stay	✓	✗	✗
Considers legal status	✓	✗	✗
Any target period can be used	✓	✓	✓
Removes records with incomplete travel events	✓	✓	✓
Accounts for short periods outside the country	✓	✓	✓

Further analysis of these methods are currently being carried out and will be published later this year.

# (3) Circular patterns of movement

At present, we have looked at circular travel patterns focused on 'short term stays'. This is more broad than the UNECE definition.

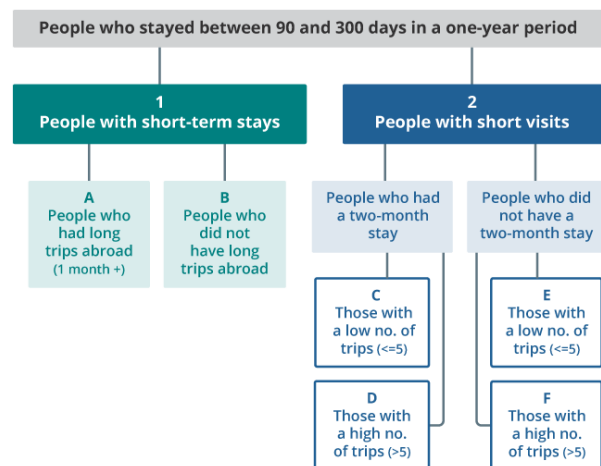
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## Circular patterns of movement

We looked at people's travel patterns for a selected group over a two-year period using Home Office administrative data.

We then classified the sample into six groups based on frequency of trips and length of stay.

Further analysis of this method is currently being carried out and will be published later this year.



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# Next steps

- ONS will continue to use existing UN definitions to produce estimates of international migration in the UK both using survey and administrative data
- Alongside this, we continue explore alternative definitions using administrative data to provide further flexibility and insight to our users
- We will focus on how we can use further data sources to improve our coverage and address known challenges
- We will continue to update on our progress, seek user feedback and engage on our research and proposals

# Questions and Discussion