



# Assessment of non-official statistical sources for SDG reporting

#### What are non-official statistical sources?

- Statistics produced by non-official organisations, not covered by government or other formal standards (Code of Practice).
- An output that does not come from a UK governmental department or government-related body, local or devolved authority, or an official international reporting body (e.g. Eurostat, UNSD, OECD).
- Examples: charities, businesses, academia.
- Benefits and risks

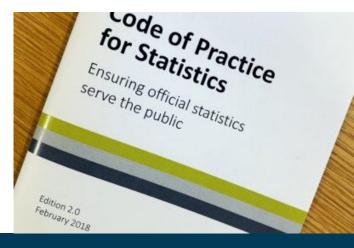
General Assembly	Dia 3
Sixty-eighth session Agenda item 9	
Resolution adopted by the General Assembly o	n 29 January 2014
[without reference to a Main Committee (A/68/L.36 a	nd Add.1)]
68/261. Fundamental Principles of Officia	al Statistics
The General Assembly,	

Distr.: General 3 March 2014







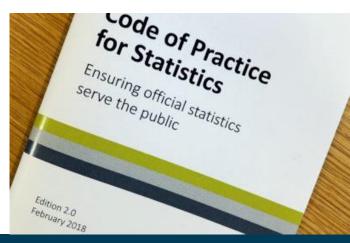






#### **Protocol for assessment of non-official sources**

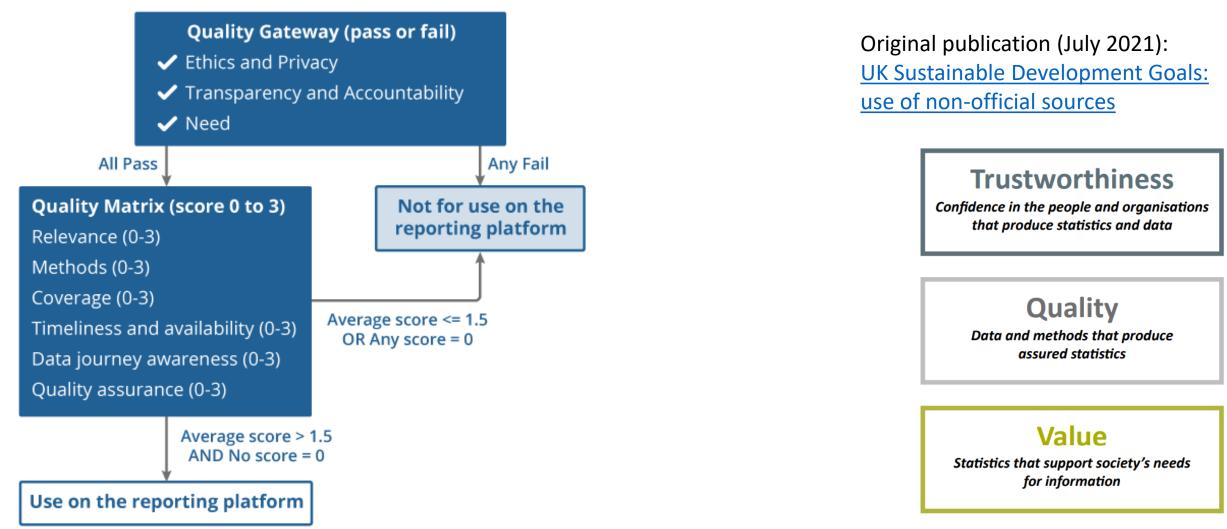
- Based on a model from Statistics Netherlands, and aligned with UKSA <u>Code of Practice</u> and Ethics Advisory Committee guidelines
- Covers assessment of statistical data sources
- SDG-specific, but could be adapted to non-SDG context for wider use
- Provides a numeric score for each source to aid decision for inclusion on the UK's SDG data site







#### **Protocol for assessment of non-official sources**





#### **Current non-official sources examples**

- Indicator 8.10.1 ATM numbers from LINK
- Indicator 6.6.1 Ground water levels from British Geological survey and river flow data from Centre for Ecology and Hydrology (in progress)
- Indicator 3.1.1 Maternal mortality from The National Perinatal Epidemiology Unit and MBRRACE charity
- Indicator 12.3.1 Food waste per capita from WRAP charity
- Indicator 1.4.2 Rights to land and tenure security from Prindex



wr∂∤⊃









## Case Study: Beach Litter







#### **Process**

- Met with MCS to discuss methods
- Ingested raw data
- Assessed the data
- Made quality & method information available (Github)
- Published in the ONS Natural Capital accounts





### Citizen Science Data:

large sample sizes BUT

variables less tightly controlled

Photo © Marine Conservation Society

#### What is driving trends in litter density estimate?

Actual change in litter density

---- OR ----

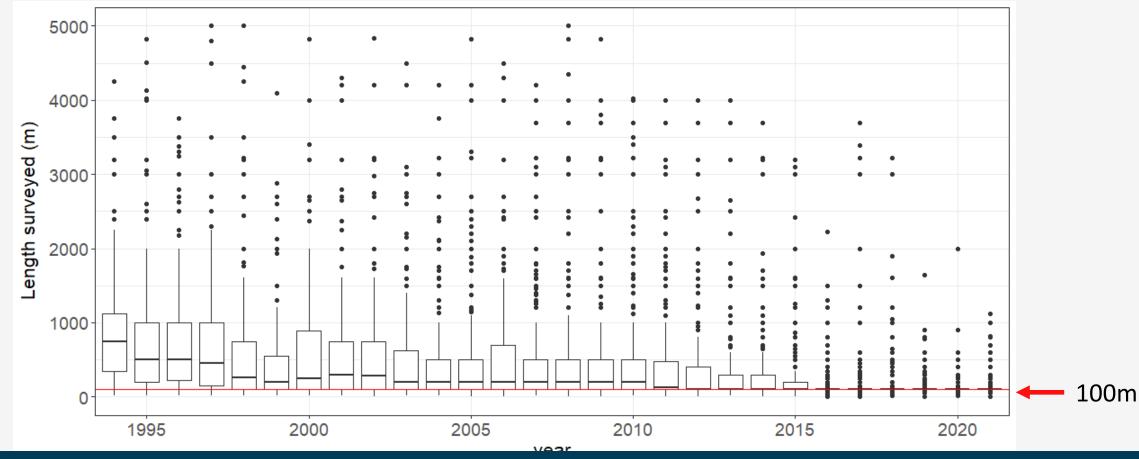
- Length of beach surveyed
- Number of volunteers
- Composition of beaches
- Weather etc.





#### Trend in length of beach surveyed, UK

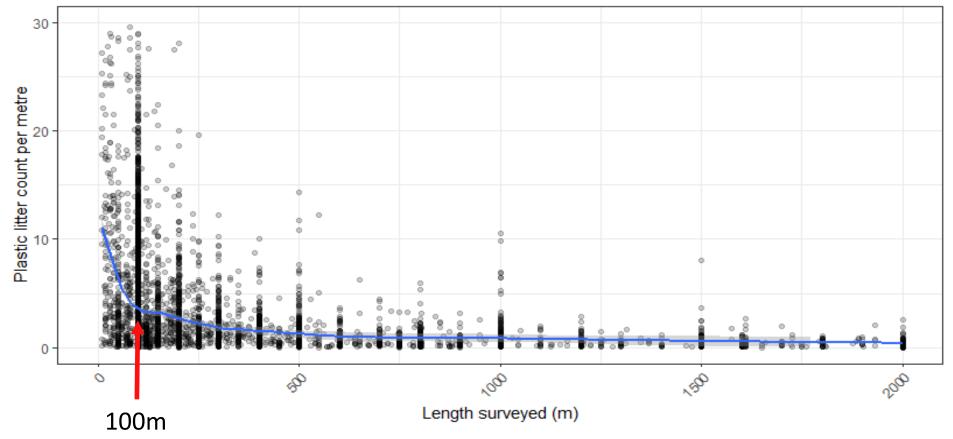
Stretch surveyed was longer in earlier years





#### Length surveyed impacts litter density estimate

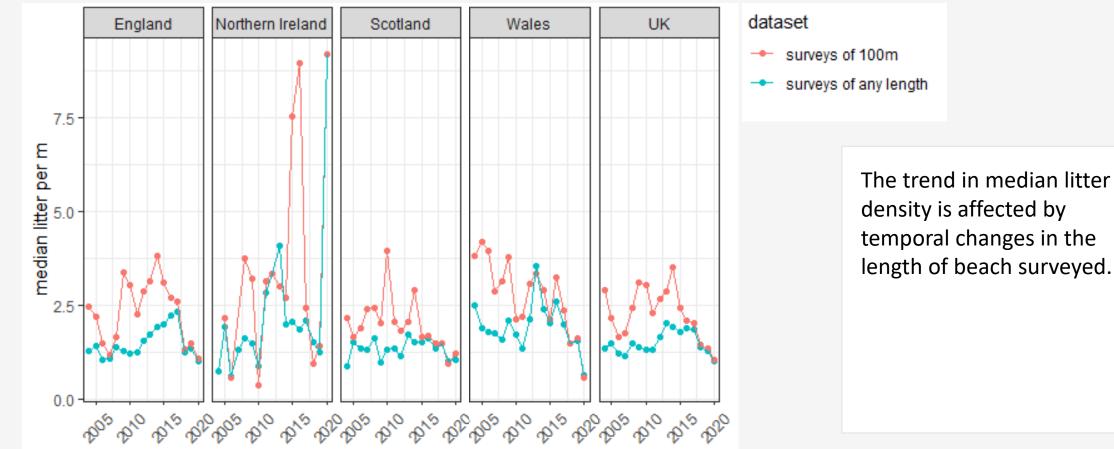
After adjustment for length, shorter stretches have higher litter densities





#### Non-standard-length surveys impact the trends

Increase in litter count from 2011 is misleading





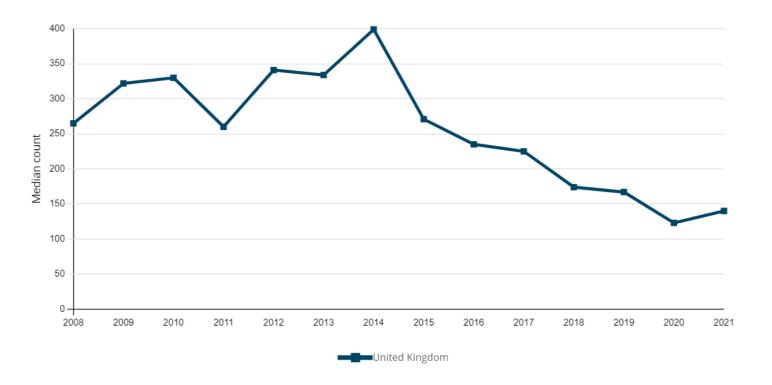
#### **Adjustments made**

- 100m surveys only
- One survey per beach per year
- Median used, not mean (skewed data with outliers)
- Quality notes (e.g.):
  - -2020 low volunteer numbers so not comparable with other years
  - -Counts not comparable across countries (average volunteer counts differ)
  - -Can't control for length of time since beach was last cleaned



#### **Beach litter (beach surveys)**

#### Beach plastic debris density





Source: Marine Conservation Society (MCS) and Office for National Statistics (ONS)

Geographical Area: United Kingdom

Unit of Measurement: Median count

Footnote: 1. Some estimates are based on a small sample of beaches and are therefore less reliable. This is particularly the case for Northern Ireland, and older values for Wales and Scotland. Median counts based on fewer than 35 beaches are flagged as 'low reliability' in the download table (select 'Download Source CSV'). Median counts based on fewer than 4 beaches have not been included due to very low reliability.

2. 2020 figures should be treated with caution as volunteer numbers were significantly lower than in other years.

3. Comparisons in count should not be made between countries due to differences in volunteer numbers.



## Questions



## Thank you!

Contact: SustainableDevelopment@ons.gov.uk Website: <u>sdgdata.gov.uk</u> Publication: <u>UK Sustainable Development Goals: use of</u> <u>non-official sources</u>



