

Deflator Gateway: building a central system for deflator processing

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Agenda

1. National Accounts at the ONS
2. Background to the Deflator Gateway
3. Key aims
4. Progress so far and lessons learnt
5. Next steps

National Accounts at the ONS

ONS in a nutshell

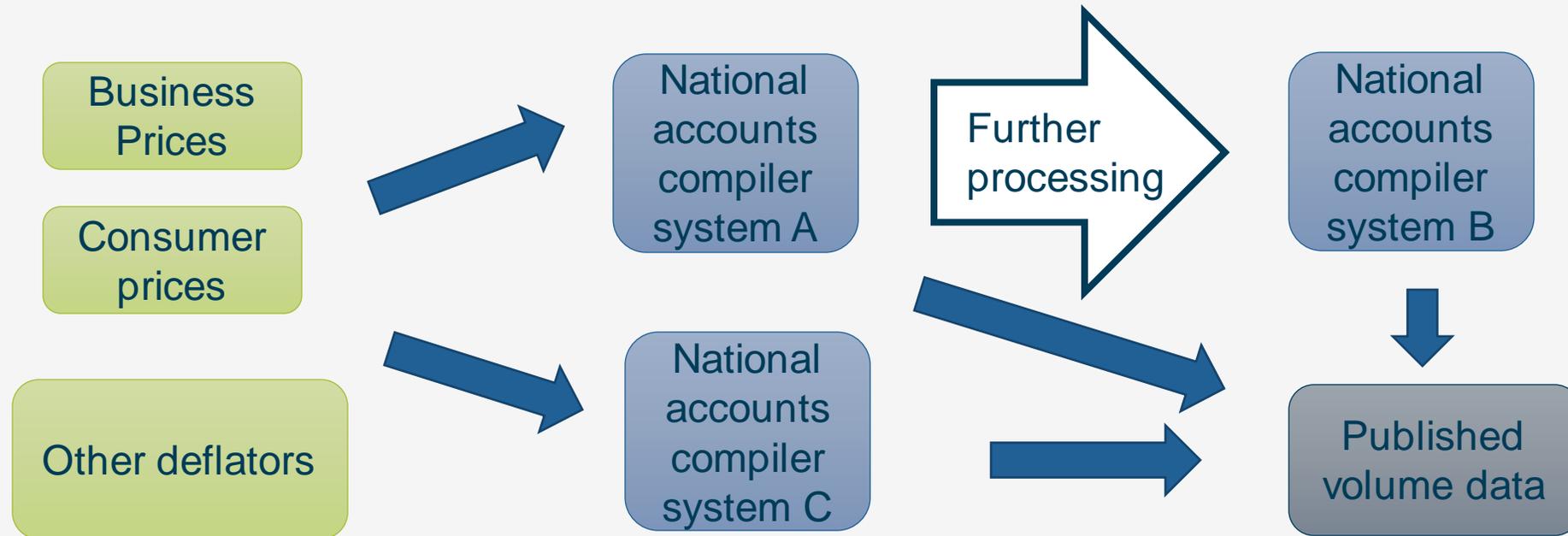
- ONS is the main provider of official statistics in the UK.
- ONS produces all core economic statistics such as inflation, labour market statistics, Balance of Payments and UK National Accounts.
- ONS also produces statistics on population, migration and is responsible for running the census.
- In addition, a variety of social statistics such as crime, human capital and wellbeing are produced.

Deflator Gateway Background

Background

- Historically, there hasn't been a one dedicated owner of deflators. Each National Accounts team has been responsible for the deflators in their own system.
- Prices teams would deliver data into National Accounts and then compiler areas would do their own processing on that data to create the final deflators.
- Over the years, this has resulted in deflator use and processing being a bit of a “black box” in some instances and leading to some inconsistencies between methods and sources used to compile deflators.

As is deflator processing



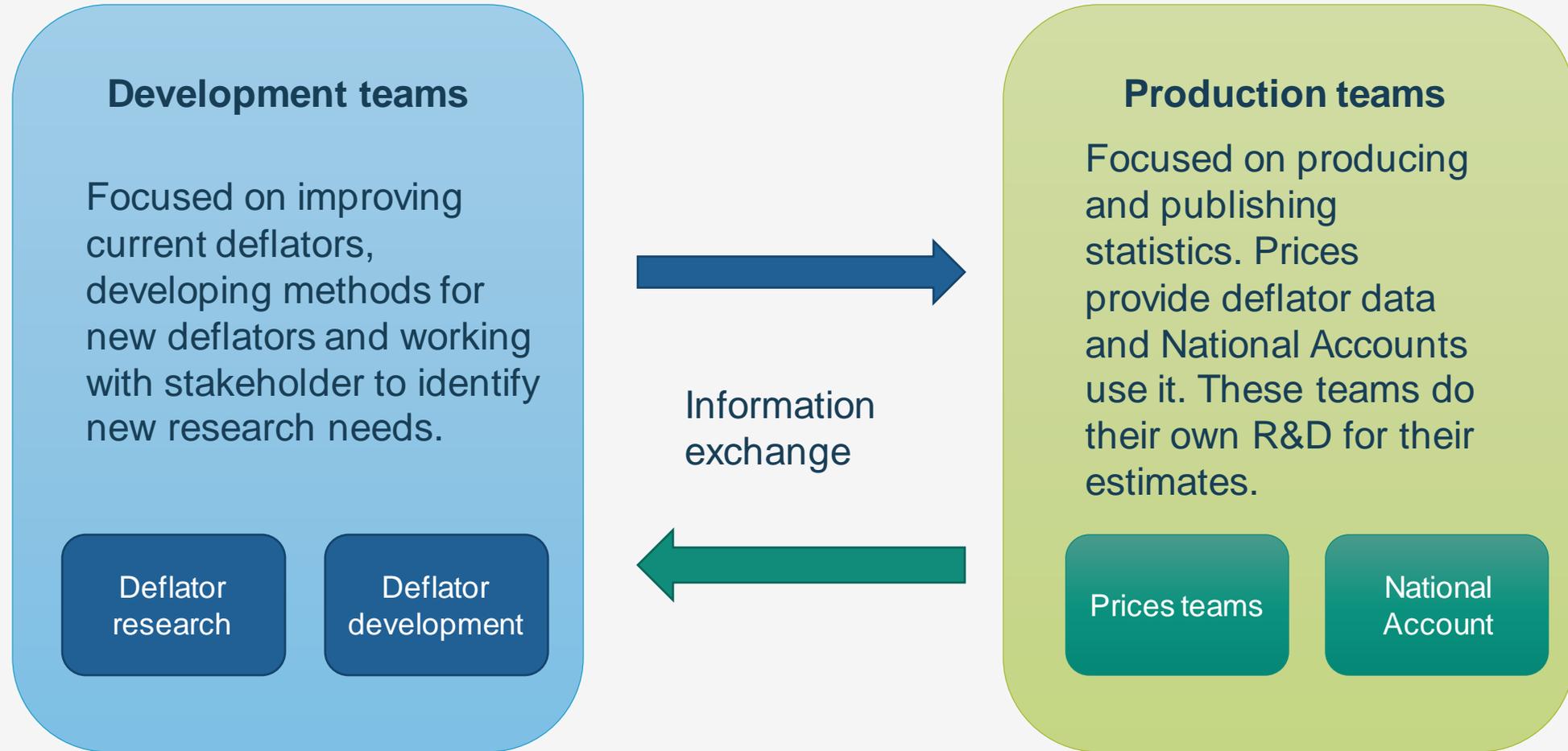
Background

- In 2018, ONS started a project looking to implement Double Deflation in the UK National Accounts.
- This project really highlighted the importance of deflators as a concept in their own right and the need to have a dedicated system for deflator processing and dissemination.

Start of the journey

- At the start of this journey to improve the understanding, quality assurance and narrative around deflators, ONS set out to:
 - Give more dedicated focus on deflators through establishing a Deflators team.
 - Do a comprehensive review of the 'as is' processing and system design through the new Deflators team and dedicated resources within production areas.

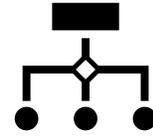
How teams are organised at ONS



Deflator strategy



Capturing quality change more effectively in fast changing industries.



Better use of existing data sources and methods, improving quality and consistency of deflators across economic statistics



Efficient and effective process that improves the production, quality assurance and narrative around deflators.



Better use of admin and micro data sources.

Key aims

Developing a central system

- To overcome the issues identified with the current system for deflator production, a dedicated Deflator Gateway project was set up to develop a central system for deflators.
- The system needed to be designed so that we would have an integrated process for data supply from Prices to Deflators, and from Deflators to the National Accounts.

Building the system

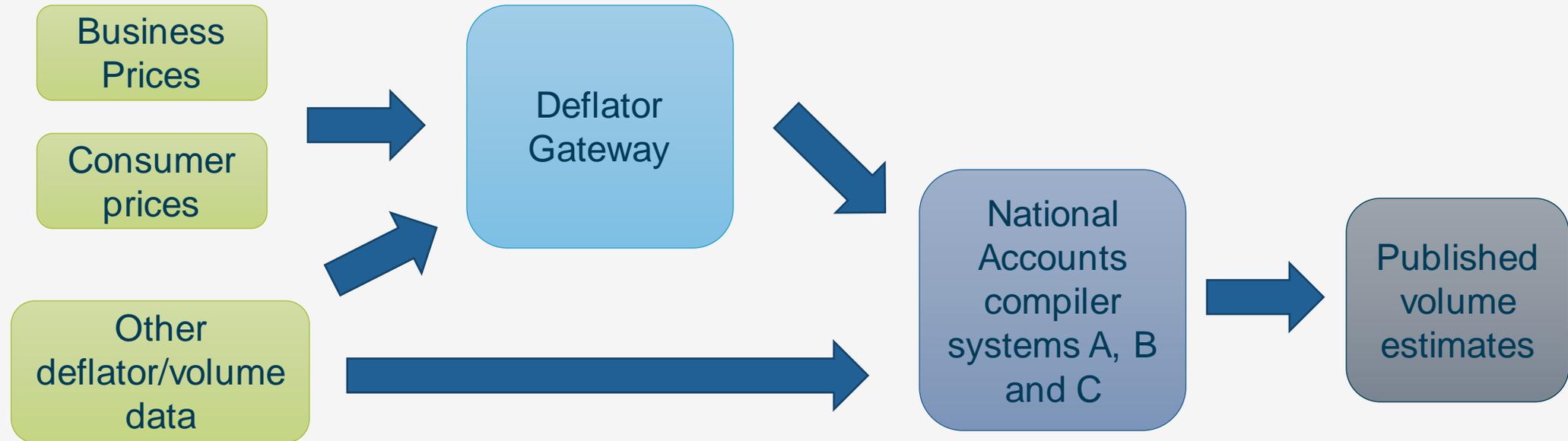
- To build a large-scale system like this, we have utilised resources from various teams across the ONS to make most of the in-house expertise.



Deflator Gateway aims

- The Deflator Gateway aims to:
 - Streamline the processing of deflators across the National Accounts.
 - Create more consistency and transparency around the use of deflators in the various processing systems.
 - Make quality assurance of deflators easier.
 - Improve the narrative around deflators.
 - Reduce the burden on compiler areas.
 - Improve vintage control.

Deflator Gateway system outline



Scope of the 'to be' system

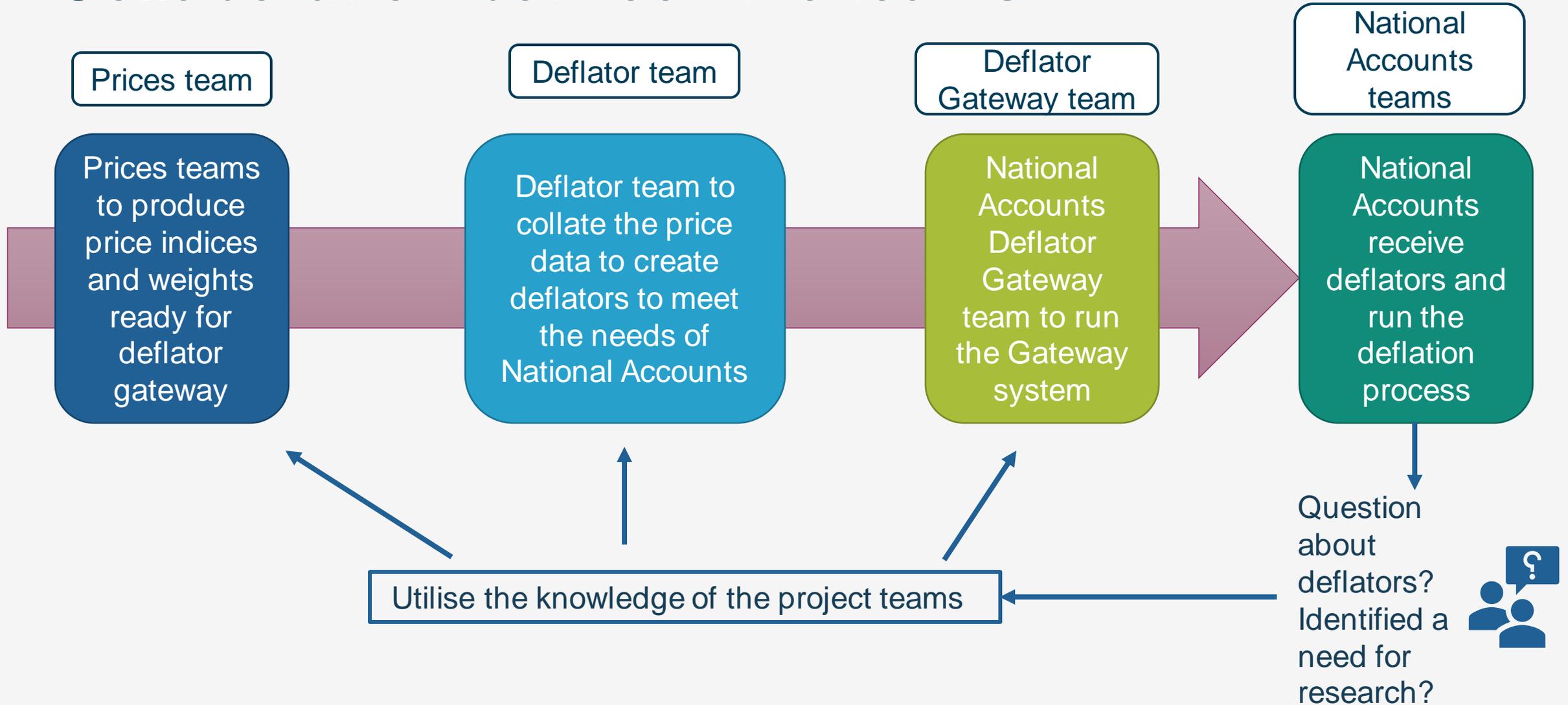
In scope

- Business prices data
- Consumer prices data
- Wage based indices
- Industry deflators
- Deflator aggregations

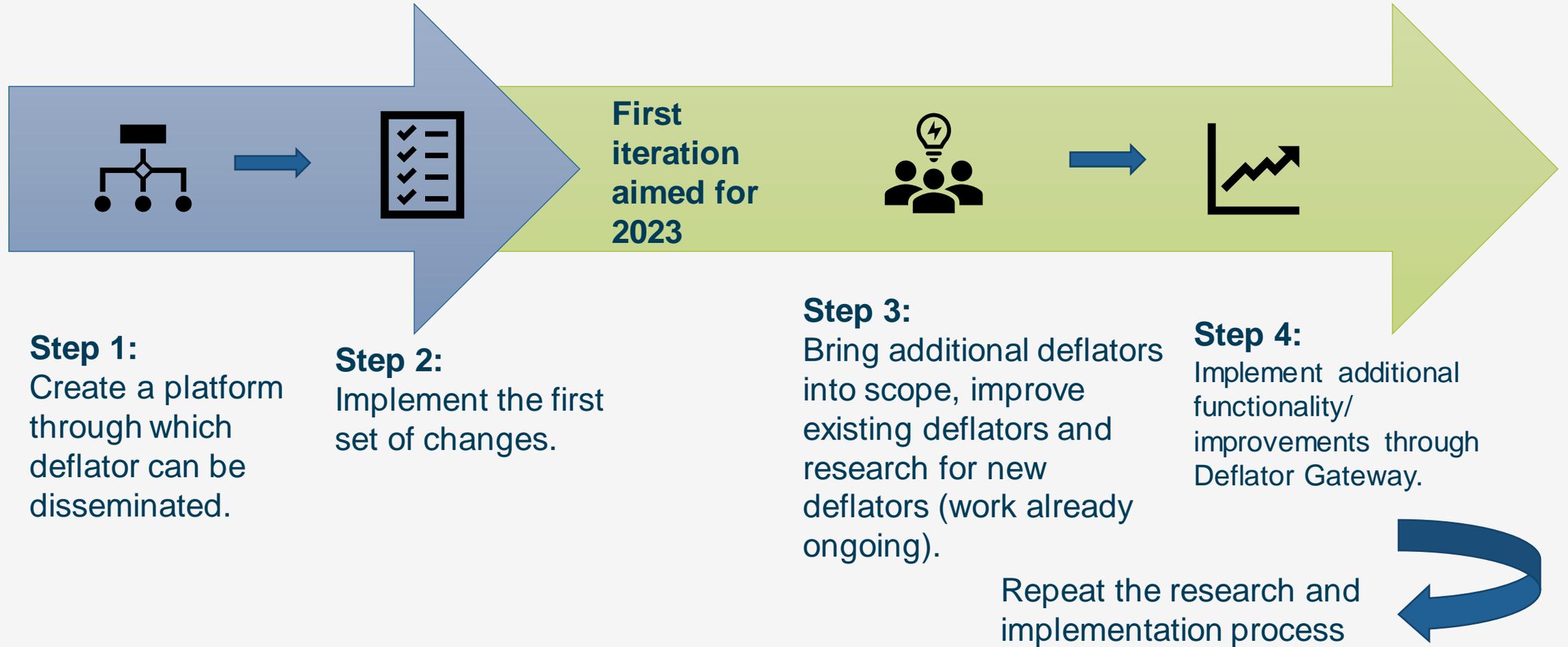
Out of scope

- Implied deflators
- Volume indicators
- Bespoke deflators

Collaboration between the teams



Deflator Gateway Roadmap



**Progress so far and
lessons learnt**

Progress so far

- Engagement with internal stakeholders to understand their current deflator processing in more detail and to collect requirements for the new Deflator Gateway system.
- To conduct a proof-of-concept test, we built a scaled down prototype system.
- Used prototype system as a “blueprint” for the production system build.

Challenges and lessons learnt

- Challenges:
 - Current deflator processing is quite complex.
 - Building and implementing a large scale system like this requires dedicated resource.
- Lessons learnt:
 - Importance of having a project team with variety of skills.
 - Collaboration between the different teams is key.
 - Spending time to build a prototype is worth it.

Next steps

Next steps

- The first iteration of Deflator Gateway is aimed for 2023 implementation and further changes are planned for subsequent years.
- Impact on the UK National Account will be covered in the Blue Book 23 articles.

Thank you for listening!

Any questions?