

Issue 09
October 2022



NFI MATTERS

Developing strategies to detect and prevent fraud



Welcome to the 9th issue of NFI Matters

As we are busy preparing for the 2022/23 national exercise, we have opted to produce a shorter version of NFI Matters containing all the essentials that you need to know between now and March 2023.

We are always on hand to answer your queries so please get in touch either by email or call us. If you are new to the NFI please get in touch so we can ensure you have all the information you need to have a successful experience.

Yvonne Addison
Head of Operational Delivery

Email: yvonne.addison@cabinetoffice.gov.uk
Mobile: 07909 933998

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Contact us...

England: nfiqueries@cabinetoffice.gov.uk (mobile numbers are available here <https://www.nfi.gov.uk/Contact>)

Scotland: Anne Cairns
acairns@audit-scotland.gov.uk

Wales: Dave Rees
david.rees@wao.gov.uk

Northern Ireland: Val Evans nficoordinator@niauditoffice.gov.uk

Preparing for NFI 2022/23 - Tips and pointers for key contacts

There's lots of guidance within the web application to help you prepare for the upcoming national exercise, but to make sure you're set up for success, included below is some useful advice and links to extra information.

On page 4 we have also set out the process we go through from data upload to match release that we hope you will find interesting.

Understanding your obligations and preparing your team

Make sure:

You are aware of the key dates on the timetable for the 2022/23 national exercise. There is a separate timetable for the 2022/23 Council Tax Single Person Discount annual exercise.

You are aware what data you are required to upload and which data is being submitted by bulk data providers e.g. Blue Badge Digital Service (BBDS) will provide the required ALL blue badge data. Refer to the 2022/23 Data File Upload screen within the web application for full details.

Your privacy notices are in place and compliant with the Information Commissioner's Office guidance.

You have set up user accounts for colleagues uploading data. Do they require training/guidance on how to upload? Contact us via nfiqueries@cabinetoffice.gov.uk or helpdesk@nfi.gov.uk

You are aware of the change to the residents parking permit data specification for 2022/23 and it has been reflected in your data extract routine. Data specifications and a summary of the changes are available:

- England: Refer to the 2022/23 data specifications
- Northern Ireland: Refer to the 22/23 Instructions
- Scotland: Refer to Counter-Fraud Hub for Instructions, data specifications, etc
- Wales: Refer to the 2022-23: Work Programme and Data Specifications

You have addressed any data quality failures from the 2020/21 exercise. Please refer to the 2022/23 data specifications and our online guidance on pre-submission checks.



Important - Data should be password protected and only ever be uploaded through the secure data file upload facility in the NFI web application. You must not email data to the NFI team or Synectics Solutions. Advice on how to password protect files can be found in the NFI Guidance.

Demystifying the NFI Matching timetable

Now and again we get asked about what happens between data upload and match release. Included below is a breakdown of the process, which we hope you'll find helpful.

How this might be improved for NFI 2024/25 onwards

The NFI contract with our current supplier has been extended to December 2024. During 2022/23, in preparation for the procurement of a new contract from 2024/25, we will be reassessing the NFI service requirements particularly around reducing processing times, applying new techniques and technologies into the NFI service. We will be sharing a survey with you in October that will include questions to establish your thoughts on the future direction of the NFI which we can in turn feed into the procurement documentation.

Dates	Activity	Who	Notes
Oct 7 Nov 18	Data cleansing and data quality checks		Data is submitted by participants. The data processing team cleanses each file to ensure required fields are present and minimum key field thresholds are met so the file can be used for matching. If there are any issues with the data the processor will contact the participants and request a resubmission.
Nov 18	Cut off for data submissions		This is the cut-off date for uploads so that data can be quality checked for inclusion in the January release
Nov 19	Final data cleansing		The processing team will process the last remaining files, prioritising datasets required for deceased matching. It is vital that all bulk data files e.g. Student Loans, NHS payroll, etc, are received by the required deadline as they account for a significant proportion of the data. Delays to bulk data jeopardise the timetable.
	Quality Assurance (QA)		Final QA checks are executed to identify incorrect submissions, invalid dataset types or duplicate submissions.
Dec 18	Data Enhancement		Cross matching of datasets to enhance key fields e.g. appending of National Insurance Numbers and/or Dates of Birth, replacing initials with full forenames.
W/C Dec 19	Run primary filtering rules		Primary filtering involves removing for example, police addresses, matches not affected by abatement rules, etc
Dec 20	Deduplication of datasets		Duplicates are removed from individual datasets to avoid multiple matches being created at the matching stage. This involves consolidating records and aggregating values such as Gross Pay to Date.
Dec 23	Mortality screening		The data extract is prepared and transferred securely to the DWP for mortality screening on 20 December 2022. Once matches are returned, a summary of match numbers is provided to the CO NFI Team for outlier checks. Matches are pushed to the testing environment (UAT) for final checks before release. Where possible, mortality screening matches are released as soon as they are cleared by the CO NFI Team.

Key  IT Supplier  IT Supplier/CO NFI Team  CO NFI Team			
Dates	Activity	Who	Notes
DEC 24 Jan 1	Pre-matching preparation		Matchkeys[1] are generated and appended for the individual records.
W/C Jan 2	Review of primary filters		The NFI Team review the matches and amend the filters to refine the numbers of matches released
Jan 3	Predictive Analytics		Data and matches are extracted and predictive analytics models built.
Jan 9	Risk Scoring		Risk scores are applied to the matches following the data modelling.
Jan 10	Run secondary filtering rules and ad-hoc filters/discards		Following secondary filtering, matches are pushed to the UAT area for the CO NFI Team to review.
Jan 10 Jan 15	Work commences on trade creditor matching		Trade creditors data is prepared for matching. This is completed as a separate exercise as it is matched to a participant's own data (plus Companies House) and not across NFI participants.
Jan 15	Final check of Privacy Notice Compliance (PNC)		If the PNC is incomplete, matches have to be pulled from the January release until compliance can be confirmed.
Jan 16 Jan 19	New developments released in January are tested and signed off		The NFI Team carry out testing of any new developments.
Jan 16 Jan 17	Carry out outlier checks - national matches		A summary of all national matches by participant and report is provided to the CO NFI Team to carry out initial outlier checks. Matches are reviewed in UAT at participant level. Final changes are passed to the IT Supplier.
Jan 18	Carry out outlier checks - trade creditors matches		A summary of trade creditor matches by participant and report is provided to the CO NFI Team to carry out initial outlier checks. Matches are reviewed in UAT at participant level. Final changes are passed to the IT Supplier.
Jan 18 Jan 22	Final matches discarded		A subset of the final national and trade creditor matches is discarded based on a series of filter criteria that have been built up over the life of the NFI. These criteria are regularly reviewed by the CO NFI Team. The CO NFI Team carries out a final check for outliers. You may be contacted by a member of the team if your organisation appears on the list of outliers as we try to determine if there is a valid reason or a possible data quality issue.
Jan 23	Matches released		Matches, generated from data received on time and of suitable data quality, are released into the Live web application environment.
[1] The prior year matchkey consists of a unique reference key, match status and comments recorded by participants.			

Mortality Screening -

Helping you ensure your benefits and services remain protected against overpayments

Data for the next mortality screening is required from mandatory participants no later than 2 December 2022

Mortality Screening - DWP screening

Twice a year we access the deceased persons file held by the DWP. This data also contains National Insurance numbers which can be used as a matching field alongside name, date of birth and address. The data also holds details of some British Citizens who have died abroad, and this has proven very successful particularly when administering pensions.

Mortality screening will be undertaken as part of the National Exercise with data uploaded through the 2022/23 National Exercise Data File Upload tool. We aim to release matches in January 2023. After that, the next DWP screening will take place in June 2023. The data submission deadline is usually the third week of June.

Fees for voluntary participants for the December service can be found on our GOV.UK page <https://www.gov.uk/government/collections/national-fraud-initiative> or search for 'National Fraud Initiative' in your web browser.

An innovative approach To Tenancy Fraud

Demand for social housing is outstripping supply, a situation exacerbated by the pandemic. It is estimated that up to 50,000 homes may be unlawfully sublet, which equates to more than 1 in 100 housing association and council homes across England.

Our engagement with NFI users has revealed that Housing Tenancy Fraud is consistently one of the most challenging and time-consuming areas of fraud. In April 2022, we met Housing Association and Local Authority colleagues tasked with managing and investigating tenancy fraud, at the Tenancy Fraud Forum Conference. This event reinforced and refined those views and resulted in expressions of interest for an NFI Pilot. A pilot that would be innovative and holistic in bringing in data sets from credit reference agencies, enhanced by data from Financial Service providers and Insurers.

We have carefully designed this tenancy fraud pilot with support from users, via the Housing Tenancy User Group. The pilot will result in a clear output of matches that brings together multiple sources of public and private sector data to allow bodies to prioritise investigation of those with greatest fraud risk. We anticipate that the pilot will run in two phases, with the first release of matches from early October 2022. We will look to introduce additional datasets in later phases, to build a solution that targets this significant fraud risk.

Please look out for our update in the next edition of NFI Matters.



Public Sector
Fraud Authority

The NFI and *how* it fits within

The Public Sector Fraud Authority

The Public Sector Fraud Authority (PSFA), launched in August 2022, sits at the heart of government, reporting to HM Treasury and the Cabinet Office. The PSFA will bring together experts from across sectors and has also become the centre of the Counter Fraud Function (CFF). The NFI sits within the CFF and will remain a PSFA support service for Data and Intelligence.

The PSFA Mandate details how it works within government, including its responsibilities as well as the responsibilities of the Departments and Public Bodies engaging with it.

All PSFA operations are underpinned by the following five value principles:



Over the next three years the PSFA's remit includes greater focus on counter fraud performance and outcomes as well as increased depth and breadth of support to public sector bodies. This will include sharing best practice across the public sector including devolved administrations and local government.

With an increased focus on data analytics, the PSFA will provide further opportunity for the NFI to support public bodies and further develop our products to reduce fraud in public services, ensuring that taxpayers' money is spent where it is needed most.

FraudHub proves working together yields many rewards

FraudHub from the NFI continues to grow. We now have over 30 councils actively using the service across the UK delivering fantastic results, with return on the initial investment often being recouped soon after go-live.

FraudHub is built within the NFI secure system, so setting one up is quick and easy, providing you with a single repository for data, helping you to identify fraud and error rapidly.

With the ever-increasing demand on resources, being able to be flexible and focus staff in priority areas is critical. Fraud hub facilitates collaborative working and intelligence sharing across organisations and within regions.

Many of the current users are seeing significant returns in the following areas:



Mortality screening of pension payments

Stop payments and services before potentially large overpayments arise causing distress to family members



Housing Tenancy and Waiting Lists

Identifying where tenancies are being sublet or where individuals are not entitled to be on housing waiting lists



Council Tax Reduction and Single Person Discount

Ability to gain a clear view of who is resident at a property and to determine if they are in receipt of other benefits or claiming in neighbouring areas

We continue to develop FraudHub, and a raft of developments are currently happening or being explored:

- Redesign of web pages and user interface
- New risk scoring against match referrals
- Customer visualisation capability to aid investigations and highlight inconsistencies
- Data collection by API
- Dashboard reports and analysis
- Enabling Local Authorities to perform matching under their own powers

A spokesperson from The City of London, Shared Anti- Fraud Services said "With the introduction of the FraudHub we are now able to share intelligence, taking a proactive stance to detect and prevent fraud. Fraudsters often change their techniques so local authorities need to do the same, increasing vigilance, pooling data, and creating a singular repository or area intelligence unit that can be easily accessed by all members. The ability to provide a collaboration network allowing organisations to learn from one another and share not only data but best practice and knowledge is essential.

The City is a keen supporter of NFI and uses data to make the best use of the resources available to the organisation to identify and reduce the impact of fraud. Having an ongoing relationship with the NFI Team and knowing their product and its scope to deliver positive output was attractive to the City of London as it meant we could onboard quickly and start to reap the benefits from Fraud Hub quickly.

The City has successfully used additional NFI products such as AppCheck for a number of years and having this included in the annual subscription for Fraud Hub helped to offset the cost of the Hub and allows us to roll-out this product to more users and fraud risk areas across the organisation."

For more information or to request a demonstration of FraudHub please email louise.williams@synectics-solutions.com or call 0845 345 8019.

The NFI Pilot

pipeline

ABOUT THE NFI PILOT PIPELINE

The NFI pilot pipeline includes ideas in various stages. They range from pilots that are in their infancy, and require further research, through to pilots where the case is clear. Some ideas are abandoned early on, either because there is no clear legal gateway or perhaps there is a lack of evidence of fraud. Pilots can be small, involving one organisation using only their data, or larger, involving multiple organisations matching data within and/or between bodies, they might also involve third party data, perhaps from the private sector.

PILOT TITLE

SUMMARY OF FRAUD PROBLEM

School admissions	Potential fraud in relation to residency to secure preferred school placement
Disabled Facilities Grants	Potential fraud around non-residency of applicant and/or, multiple applications
Unauthorised dwellings	Potential fraud around illegal dwellings aka 'beds in sheds'
Council Tax Exemptions	Potential for matching to Probate records to ascertain where exemptions are no longer valid
Business Rates	To identify potential business rate fraud where a business property has an electoral roll registration

The main pilot being launched for NFI in 2022/23 is the tenancy fraud pilot (see earlier article). A number of pilots currently have matches live and/or are being evaluated. The above table lists some of the pilot ideas we currently have in the pipeline.

For more information about the NFI pilots please contact Nathan Nash on nathan.nash@cabinetoffice.gov.uk or 07977 340550.

FOCUS ON

The Billing Information Page

Are your billing details correct?

Have you checked your billing information page recently? If so, you'll see a few changes. The changes have been made to improve the transfer of information from the NFI to Shared Services Connected Ltd (SSCL - the provider of financial services to the Cabinet Office).

The main additions are your Customer Number, Customer Name and Billing Location (either a number, postcode or a place), these can be found on your invoices.

With nearly 800 invoices going out consecutively in the new year, we need a smooth flow of information. Ensuring the correct information is placed on invoices is essential as it enables invoices to be paid quickly and without issue, saving time and saving money. We can even have the invoice issued directly to your Inbox!

If you realise that a piece of information is incorrect on your Billing Information page (located under Administration in the NFI web application) please update it without delay. The NFI Team will be automatically notified of the change, and they will notify SSCL, resulting in this new updated information being used to draft your invoice.

So, if you have not checked the information on your Billing Information page for a while please have a look!

Product/Exercise	Fee (£)	PO Number
NFI 22/23 National Exercise	4130.00	123456

If you have any questions about, billing please contact:
nfiquiries@cabinetoffice.gov.uk



AppCheck - Company Search

In previous NFI Matters we told you about an exciting development we were making to our AppCheck product bringing in company information. Thanks to those of you that helped shape this over the past few months and continue to help us. We are now working to demo this functionality to users early in 2023.

This will bring together an array of company information in one place to help you to rapidly verify a company or charity to assist with checks around: Business rates, Procurement, Employee declaration of interests.

This development of the AppCheck product tool will allow you to establish who the directors and trustees are within that organisation, along with other organisations they may be linked to, and provide information relating to the company registration as well as its trading status. As with other AppCheck searches, the information will be returned within a few seconds.

We look forward to telling you more and demonstrating early in the new year. Please contact kiri.wismann@cabinetoffice.gov.uk if you'd be interested in having an early look at the tool.

AppCheck has been extended to accept a file containing multiple applications for checking

AppCheck has been extended to include a file upload option in addition to the single search. To use this new facility select your application type, then the File Upload option and follow the on-screen instructions. The results will be published in your 'Previous Searches' when they are ready.

If you need a hand call our Helpdesk on 0845 345 8019.

Data that has been refreshed

between March 2022 and October 2022

The following data sets have been refreshed. This means you are able to run ReCheck and FraudHub jobs and AppCheck searches against more current data.

Dataset	Dates	Timing of refresh
Disclosure of Death Registration Information	2022 OCT	Every two weeks
Housing Benefit	2022 AUG	Quarterly
Amberhill	2022 JUN	Annually
Council Tax and Electoral Register and Liable Persons	2022 MAR APR	Annually
Companies House	2022 FEB	Annually

NEW PURPOSE UPDATE

In August we published the response to the consultation on extending the National Fraud Initiative, to include new data matching purposes, on GOV.UK. There were almost 400 responses to the consultation, and we would like to thank all individuals and organisations who took the time to provide feedback.

The Government remains committed to doing more to prevent and detect fraud, and to supporting bodies in enhancing their fraud response, including through the creation of the new Public Sector Fraud Authority. Fraud will remain the focus of the NFI in the coming years to supplement this wider drive against fraud. The NFI will therefore not be extended to any of the new purposes at this current time.

In the months and years ahead, the NFI will continue to work closely with key stakeholders and interested parties on the possibility of extending the NFI service to additional areas, and the Cabinet Office may seek to consult again on extending the NFI to new purposes in the future.

If you have any questions about NFI and Cabinet Office data matching, or feedback in relation to this consultation, please do not hesitate to contact the NFI team at nfiquiries@cabinetoffice.gov.uk.

User interface survey results

In spring 2022, we engaged a User Experience expert, to collect views from a random sample of users with a view to improving the NFI web application. We were very pleased to also receive feedback from this work on subjects that went wider than the web application. We have been analysing these into themes and will share how we plan to address them in a future newsletter or separate email communication.

Looking at the web application, we will now be embarking on a modernisation programme. The first phase will concentrate on FraudHub, but will also extend to screens that take users on the journey from the login page to FraudHub.

The process of making the changes is quite resource intensive as although our IT suppliers do the software side, changing colours, moving buttons, changing fonts and menus, etc, the Cabinet Office NFI Team have to check all of the changes to ensure everything still works as before. This is done in a User Acceptance Testing (UAT) version of the web application before it is pushed to live in one of our monthly software releases.

As a result, further modernisation phases are likely to be next year because of the clash with the national exercise when all resources are channelled into releasing matches by the end of January 2023. We hope you will bear with us during this modernisation programme.

A recap and update -

On risk scoring and plans for 2022/23

As you will recall risk scoring was introduced for the NFI 2018/19 national exercise. It was recognised as a way to meet the initial challenge of producing a base methodology to enable the NFI to identify the highest priority matches and introducing the concept to users.

Currently two different match level risk scores are available (as well as a group level risk score):

- An 'NFI Risk Score' which is a combination of
 - o the set of criteria formerly referred to as 'recommended filters' for each dataset combination to indicate a higher likelihood of fraud; and
 - o a 'footprint' score (the extent to which the match subject(s) can be found across multiple datasets)
- A risk score using our supplier's Precision software

The Precision score was introduced as a pilot in 2018 and 2021. Precision is a successful tool already in use by private sector bodies as part of the supplier's SIRA product.

Precision uses algorithms to predict where risks are higher and therefore this should assist bodies in taking a risk-based approach and allocating resources more efficiently.

Precision risk scores were initially piloted for Council Tax Reduction Scheme, Housing Benefit, Housing Waiting Lists and Council Tax Single Person Discount.

How did Precision scores compare to the NFI risk score?

The efficacy of the two types of risk scoring has been analysed by the NFI Team and the conclusion is that Precision appears to perform markedly better than the NFI risk score when using the number of fraud/error outcomes identified relevant to the risk score. Hit rates for Precision were far higher for high-risk matches.

Next steps for 2022/23

Based on our analysis and user feedback during the 2020/21 exercise; for 2022/23 we will:

- adjust the Precision scores to ensure it looks at higher risk matches
- keep risk scoring as three bands Very High (VH), High (H) and Medium (M)
- keep a percentage score
- discontinue group risk scoring as they were considered to be confusing
- continue to apply Precision risk scores for the 4 datasets previously piloted, but for remaining datasets the NFI risk score will be applied, until they have also been piloted using 2022/23 outcomes/activity.

We will continue to talk to you about risk scores and how they are presented throughout 2022/23.

If you have any further comments about risk scoring please email nfiqueries@cabinetoffice.gov.uk FAO Dave Nicol.

Dates for your diary

We attend a lot of conferences and often have a stand. It's always great to meet with our participants and answer queries or talk in general about all things NFI. If you want to let us know you are attending so we can schedule a catch up, email susan.baker@cabinetoffice.gov.uk and we can put you in touch with the attending team member. Alternatively track us down when you are there!

The next conferences are:

17 November 2022 Oxford Investigations
24 November 2022 Public Sector Fraud, London

Key Contract training

Key contact training will be scheduled for the Autumn. To register your interest please email susan.baker@cabinetoffice.gov.uk.

For technical queries relating to the web application contact: **0845 345 8019 / helpdesk@nfi.gov.uk**

For general queries contact:

England: nfiqueries@cabinetoffice.gov.uk

Scotland: acaims@audit-scotland.gov.uk

Wales: david.rees@audit.wales

Northern Ireland: nficoordinator@niauditoffice.gov.uk



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