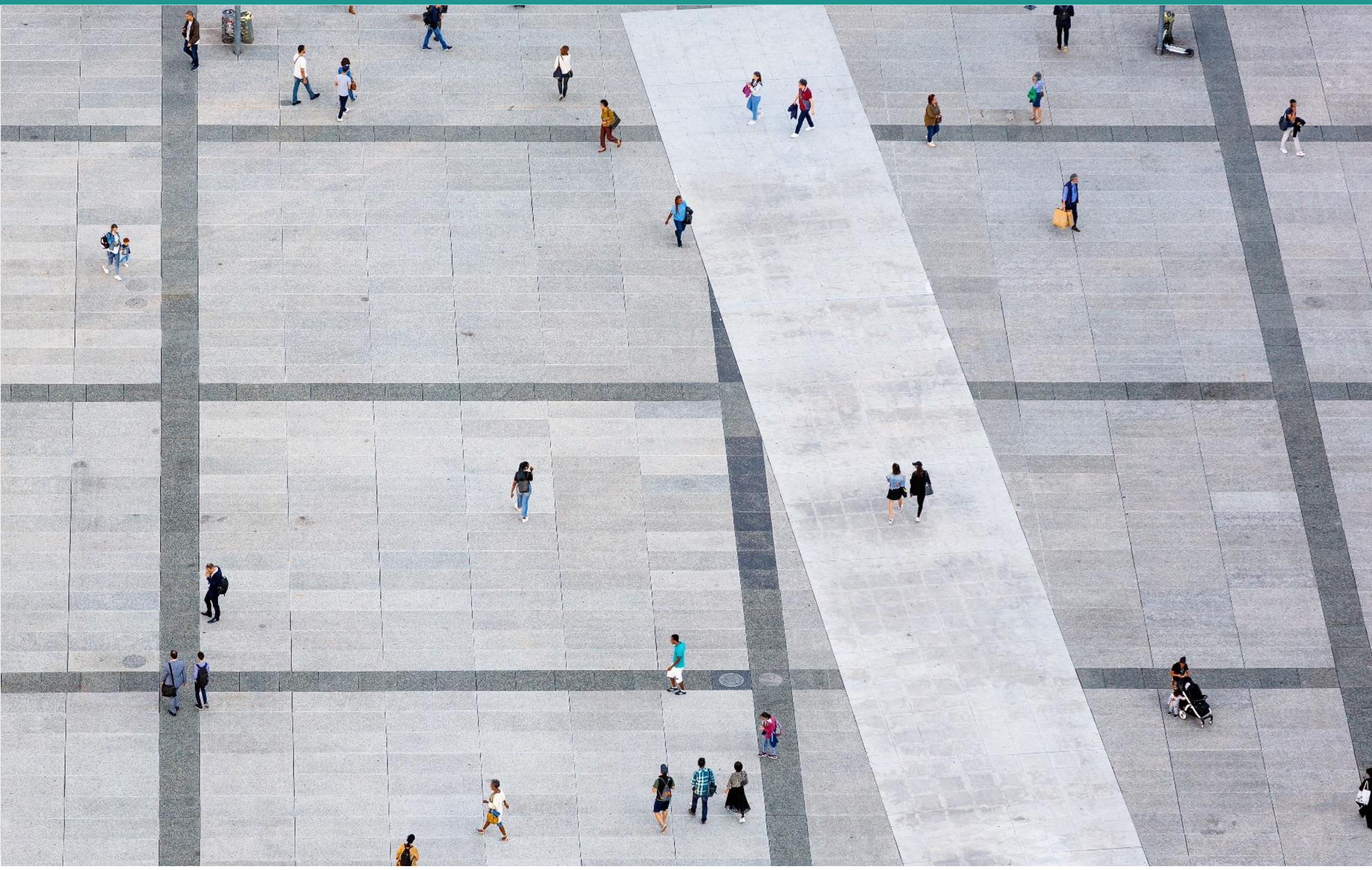
Strengthening tax compliance by implementing behavioural insights for revenue administrations in Belgium, Austria, and Portugal

Sub-deliverable 7.4: Analytical report comparing the results from the field trials in Belgium, Austria, and Portugal

Technical Support Instrument

Supporting reforms in 27 Member States



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This document was produced with the financial

Reform and Investment Task Force
+32 2 299 11 11 (Commission switchboard)
European Commission
Rue de la Loi 170 / Wetstraat 170
1049 Brussels, Belgium

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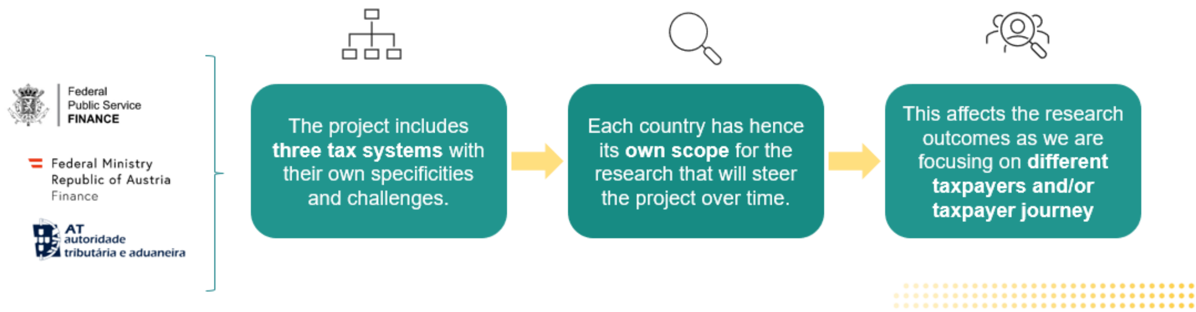
Table 1 Table of abbreviations

Acronym	Meaning
AEOI	Automatic Exchange of Information
ABCD	Attention, Beliefs, Choice and Determination – OECD behavioural framework used to structure behavioural drivers
AT	Autoridade Tributária e Aduaneira (Portuguese Tax and Customs Authority)
BMF	Bundesministerium für Finanzen (Austrian Federal Ministry of Finance)
CIP	Compliance Improvement Plan
DD	Due Date
FI	Foreign Income
FPS Finance	Federal Public Service Finance (Belgian tax authority)
JRC	Joint Research Centre of the European Commission
OECD	Organisation for Economic Co-operation and Development
PDR	Pre-Due-Date Reminder
PIT	Personal Income Tax
RCT	Randomised Controlled Trial
SG REFORM	Secretariat-General for Structural Reform Support / Structural Reform Support
TAN	Tax Assessment Notice

1. Introduction

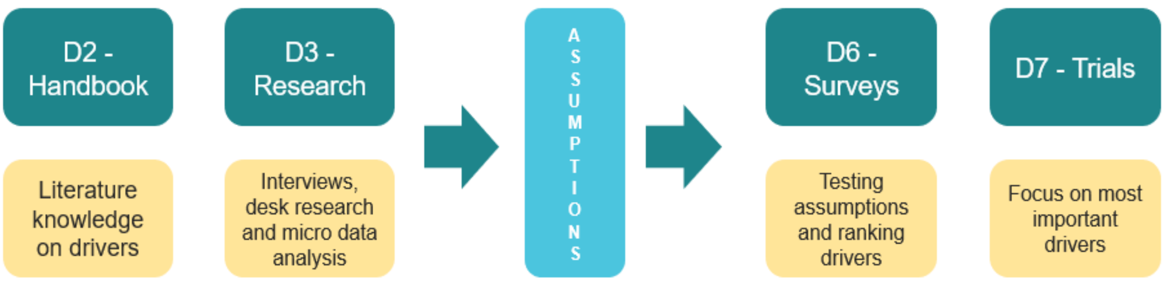
This document compares the results of behavioural intervention trials implemented between April 2025 and February 2026 as part of a three-year research project funded under the Technical Support Instrument (TSI) and managed by the European Commission's SG REFORM. The project used behavioural science to enhance tax compliance in Belgium, Austria, and Portugal, while building long-term capacity within each national tax authority to apply behavioural insights (BI), methodologies, and interventions tailored to their specific needs and contexts (see Figure 1 for project approach).

Figure 1 Project approach



Prior to the trial implementation the tax authorities in each country followed a common diagnostic pipeline as foreseen by the project methodology. The methodological basis for the trials implemented includes extensive research on prior behavioural tax interventions and approaches, culminating in the creation of a methodological handbook for tax authorities. This was followed by a country research report that included extensive background on the tax systems of the three participating countries and taxpayer tax journeys. Building on this foundation, Verian, in cooperation with the three participating tax authorities, conducted an online survey of 2,000 taxpayer respondents for each country, followed by analysis of the survey results to identify and rank the most significant behavioural drivers of the targeted behaviour. The prioritised issues differed by country: payment compliance in Belgium, mandatory wage tax declaration in Austria, and declaration of foreign income (FI) through Annex J in Portugal (see Figure 2 for overview of diagnosis process).

Figure 2 Project diagnosis process



These drivers were structured using the OECD's ABCD framework[1], with most issues clustering around 'Attention' such as information overload or missed information and 'Beliefs' such as low perceived deterrence, misbeliefs about others' behaviour, limited understanding of obligations or consequences. On this basis, co-design workshops with each authority (FPS Finance in Brussels, AT in Lisbon, BMF in Vienna) were carried out to develop the following trial interventions to enhance existing compliance processes in Belgium, Austria and Portugal:

- The Belgian tax authority tested pre-deadline PIT payment reminders with neutral, deterrence, support and acceptance messaging, respectively, against a no-letter control, assessing whether they shifted payment earlier and improved full or extended compliance through payment plans and objections.

- The Austrian tax authority targeted first-time mandatory wage tax declarants with early reminders, including payment-information and deterrence messaging variants, and measured on-time declaration and broader payment behaviour in the wider tax journey through tax account balances of taxpayers.

- The Portuguese tax authority built on their existing Compliance Improvement Plan for FI by testing simplified emails, messaging on social-norms or deterrence, portal alerts, a questionnaire and a pre-deadline reminder. The intervention measured submission of Annex J of the personal income tax (PIT) return and engagement with the AT portal.

The three trials outlined provide a useful basis for comparison because they were developed through the same diagnostic process and all tested whether timely, targeted communication could improve tax compliance. Although each trial focused on a different obligation, they addressed similar behavioural barriers: taxpayers missing information, misunderstanding what they needed to do, or delaying action until after a deadline. This makes it possible to draw lessons from how similar tools, especially reminders, simplified messages and targeted guidance, worked across different tax systems and operational settings. This report brings together lessons from three behavioural trials to understand how targeted behavioural interventions can improve tax compliance. Across the three countries, the trials tested reminder-based communications aimed at changing when and how taxpayers fulfil specific obligations:

- paying outstanding personal income tax in Belgium;

- submitting and paying mandatory wage tax declarations in Austria;

- and declaring FI through the tax declaration in Portugal.

The report first compares how the three interventions were designed and delivered, then assesses their effects on timely declaration, payment and wider compliance behaviours in their respective contexts, including instalment plans and objections. It also considers how different taxpayer groups responded to the communication channels and behavioural messages used. By looking across the three trials, the report then identifies lessons that go beyond the individual country results. Finally, it highlights which approaches appear

[1] The OECD ABCD framework is a behavioural insights model that helps policymakers design effective interventions by understanding human behaviour. It consists of four key quadrants related to behavioural drivers: Attention, Belief formation, Choice, and Determination. Attention focuses on how people notice and process information, Belief formation examines how individuals interpret and update their understanding, Choice explores decision-making processes, and Determination considers motivation and persistence in actions. This framework aids in developing policies that correspond with human psychology by aligning policies with the behavioural drivers they aim to influence, pinpointing specific behaviours associated with these drivers, and offering strategies to assist policymakers in transitioning from behavioural issues to customised solutions. OECD (2019), Tools and Ethics for Applied Behavioural Insights: The BASIC Toolkit, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ea76a8f-en.

transferable across different tax contexts and translates the findings into practical guidance for designing, adapting and scaling future behavioural interventions.

2. Overview of the trials

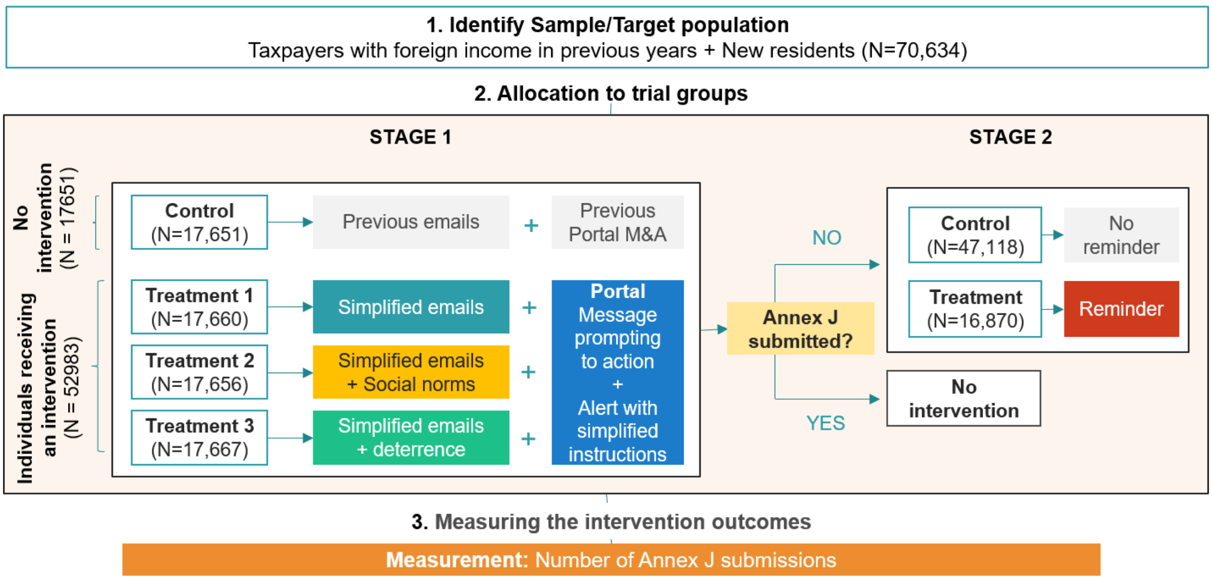
This section provides a concise comparative snapshot of the three behavioural trials carried out by the tax administrations of Belgium, Austria and Portugal, before turning to their results and implications. Each trial is briefly described in terms of its aim and target group, setting and institutional context, design and sample, and key intervention components, followed by a short cross-trial overview.

2.1. Portugal

The Portuguese trial aimed to increase the declaration of FI via Annex J in the personal income tax (PIT) return among taxpayers at risk of non-compliance and those who had recently changed fiscal residency to Portugal. The target group consisted of 70,634 individual taxpayers aged 30–80, identified from administrative data using FI materiality thresholds and indicators of domestic income and assets, split between 38,514 taxpayers with a history of FI non-compliance and 32,120 new residents. The setting was the Portuguese PIT system, characterised by very high overall filing compliance but difficulties in monitoring FI declaration due to a 1.5–2-year lag in Automatic Exchange of Information (AEOI) data. The trial was embedded in the Autoridade Tributária e Aduaneira's (AT) ongoing Compliance Improvement Plan and was co-designed with Verian and the Joint Research Centre.

The trial design was an experimental two-stage trial using administrative microdata. In Stage 1, taxpayers were randomised into four groups: a control group and three email-treatment groups (simplification only; simplification plus social norms; simplification plus deterrence), each with about 17,600 taxpayers. In Stage 2, an email reminder was sent shortly before the PIT deadline to a subset of taxpayers who have not yet filed, with assignment subject to additional randomisation. See the figure below for a visual overview of the trial structure.

Figure 3 Overview of trial structure in Portugal

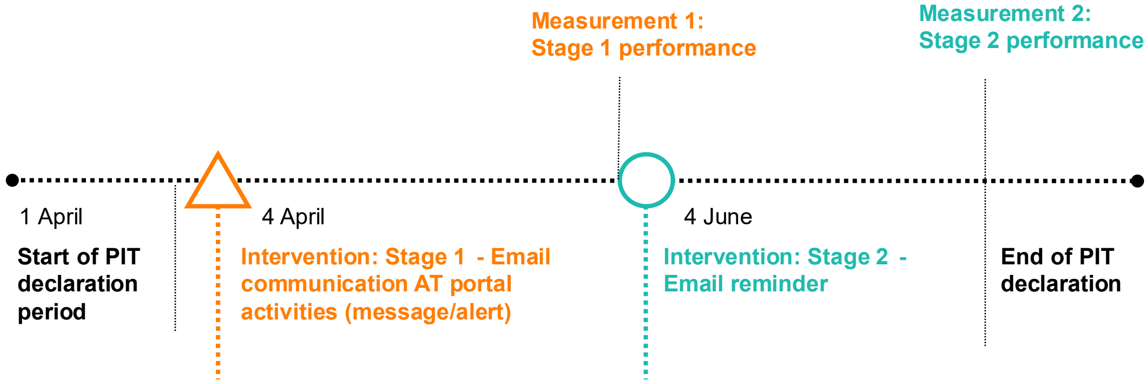


Key intervention components include tailored emails with simplified information and behavioural messaging, an AT portal alert and message directing taxpayers to a short questionnaire about their FI and residency situation, and a late email reminder emphasising what taxpayers should do if they have FI.

Across both stages, the analysis of the trial relies on large, matched samples and logistic regression models to estimate effects on Annex J submission, PIT filing and engagement with AT-portal alerts and an embedded questionnaire. Randomisation imbalances by age and region and in reminder assignment required systematic analytical adjustments via propensity score matching on age, gender, region and previous exposure.

The intervention was implemented during the annual PIT filing period from 1 April to 30 June 2025. Stage 1 began with the initial email campaign on 4 April, while Stage 2 introduced an email reminder on 4 June, around four weeks before the filing deadline. Submission rates were measured at the start of the intervention and again at the end of the filing period. An anonymised dataset of PIT declarations became available for analysis in October 2025. See the figure below for an overview of the trail implementation timeline.

Figure 4 Implementation timeline for the Portuguese trial, 2025

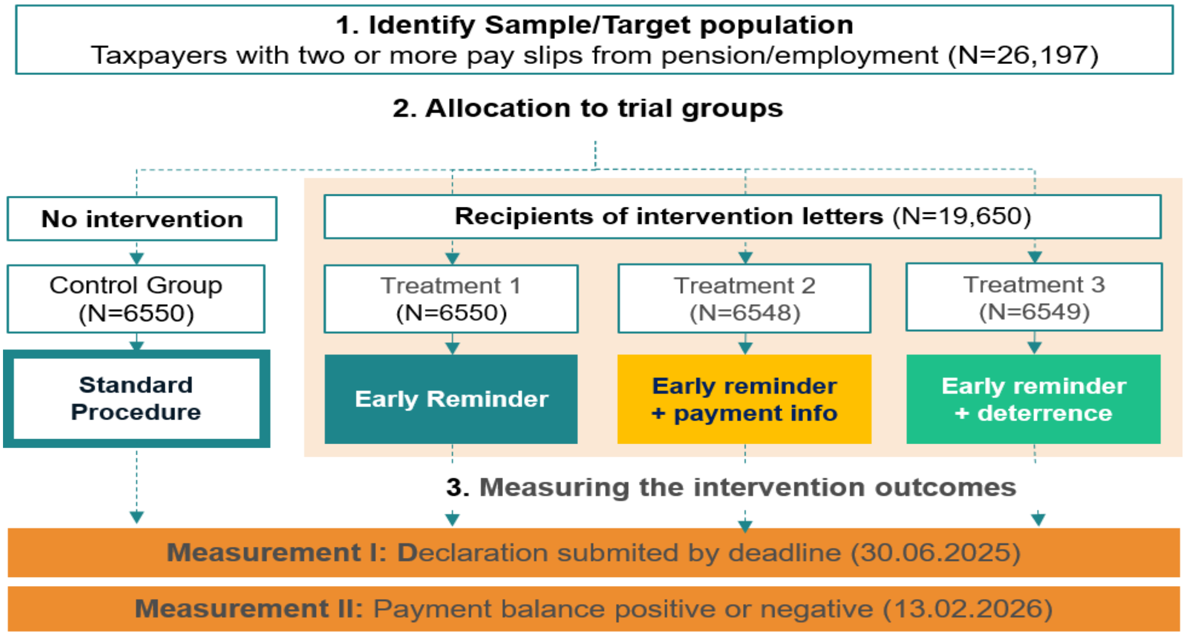


2.2. Austria

The Austrian trial was carried out by the Austrian Bundesministerium für Finanzen (BMF), focusing on improving mandatory wage tax declaration compliance among taxpayers with parallel income sources[2] who were obliged to file a wage tax declaration for the first time. In Austria, most taxpayers are not required to submit a wage tax declaration if they have only pension or employment income source; however, those with two such parallel income sources are required to do so. Because this applies to only a minority of taxpayers, many are unaware of this obligation. The target group therefore consisted of first-time mandatory wage tax declarants with parallel income sources and taxable income above the wage tax allowance. Within this group, a control segment received only the usual post-deadline reminder, while three treatment segments received an early reminder before the 30 June declaration deadline, with variations in message content: a simple early reminder, an early reminder plus payment information, and an early reminder plus deterrence messaging. The trial responded to survey-diagnosed attention and knowledge problems about whether and when declaration was required and what payment consequences could follow. See the figure below for an overview of the trial structure.

[2] In this context, "parallel income sources" refers to receiving wage, salary and/or pension income from more than one source during the same period. Under the Austrian principle of uniform taxation, this can create an obligation to submit a mandatory employee tax assessment declaration.

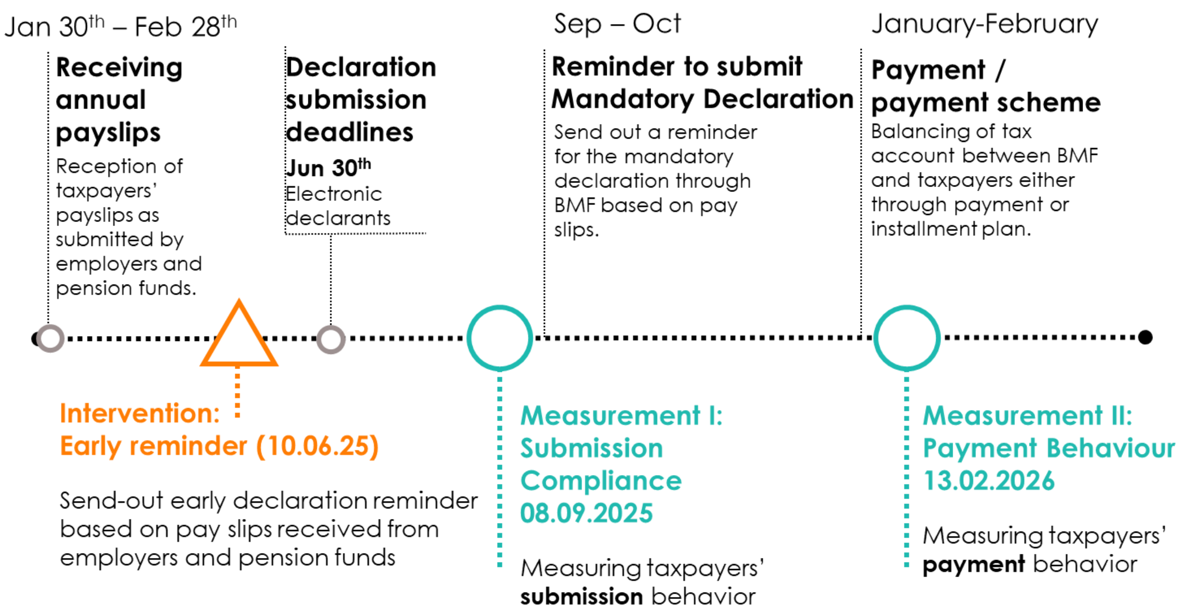
Figure 5 Overview of trial structure in Austria



The design was a large-scale randomised controlled trial using administrative taxpayer microdata on declarations and tax account balances. Taxpayers meeting the criteria were randomly allocated to control and treatment groups, with outcomes tracked at several points around the declaration and payment deadlines. Key intervention components were the early reminder letters sent before the deadline, each framed to address specific behavioural barriers: making the obligation salient, explaining potential additional payments and options such as instalment plans, or emphasising enforcement consequences for non-declaration. The trial measured on-time declaration behaviour and broader payment behaviour such as the presence of positive or balanced tax account balances by the end of the trial, with additional analyses of subgroup differences based on demographic and behavioural indicators. As with the Portuguese trial, the Austrian analysis relied on consistency checks, exclusion of ineligible or already compliant cases, and multivariate models to estimate treatment effects and results.

The intervention was implemented before the declaration deadline (30.06.2025), on 10.06.2025. The first data sect extraction/measurement took place 08.09.2025 beginning September to allow taxpayers enough time to take action after the early reminder and for all cases to be processed by the BMF. The second measurement with a focus on payment behaviour took place on 13.02.2026 after the payment deadline had elapsed for most wage tax declarants. See the figure below for an overview of the trial implementation timeline.

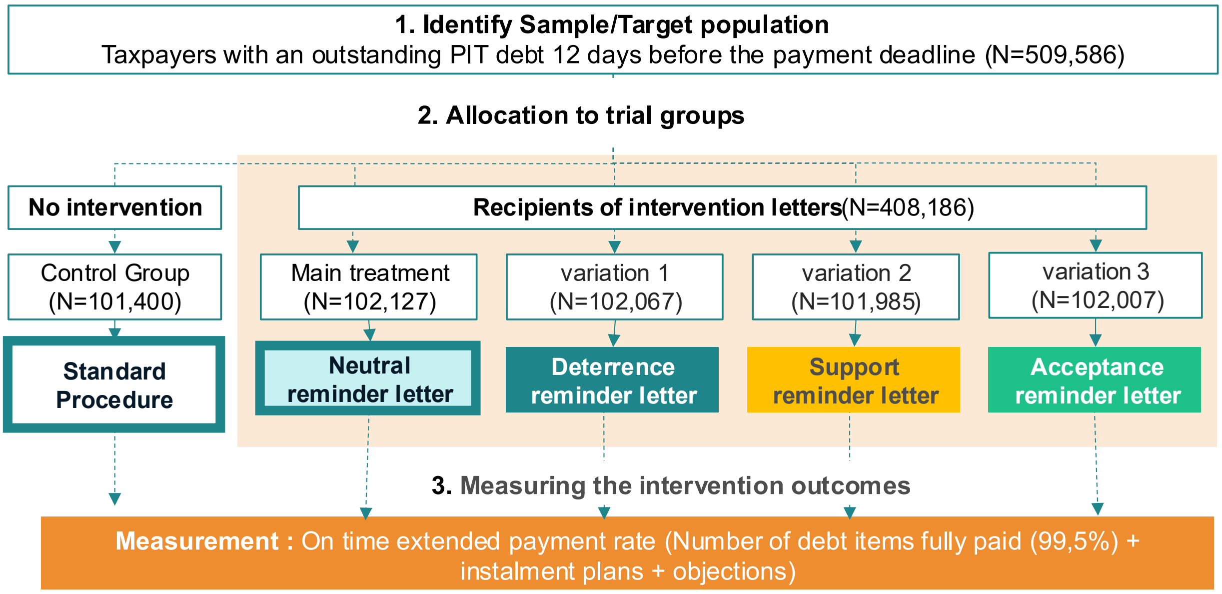
Figure 6 Implementation timeline for the Austrian trial, 2025-2026



2.3. Belgium

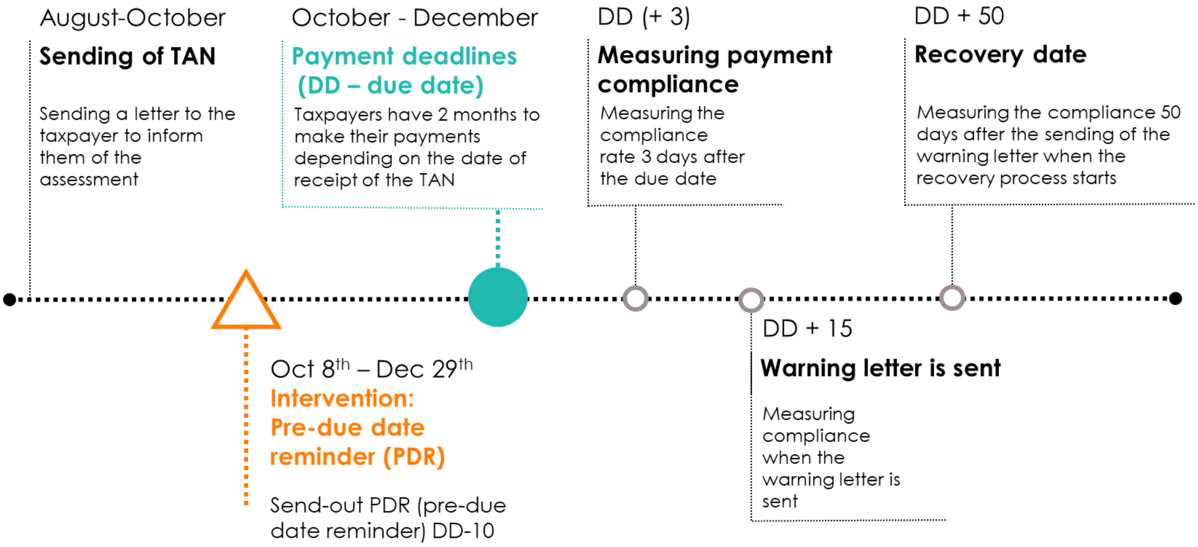
The Belgian trial conducted by the Belgian tax authority FPS Finance aimed to increase payment compliance for outstanding personal income tax (PIT) liabilities and to encourage timely regularisation of tax items via full payment, instalment plans or objections. The target population consisted of a very large sample of 509,586 PIT taxpayers (or tax items, because married or legally cohabiting couples have a shared tax assessment) who had outstanding PIT arrears due and received no early reminder under Belgium's status quo procedures. For the trial, these taxpayers were randomly allocated to a control group with no pre-due-date reminder, a neutral reminder letter group, and three behavioural reminder letter groups using deterrence, support and acceptance variations respectively. Belgian taxpayers typically receive a Tax Assessment Notice (TAN) and, if they did not pay on time, a warning letter (post-hoc) and possibly enforcement actions. Survey and microdata diagnosis had shown that non-payment often stemmed from informational, process and financial frictions rather than deliberate evasion. As in Austria, the trial design was a randomised controlled trial (RCT), with over half a million taxpayers included. See the figure below for an overview of the trial in Belgium.

Figure 7 Overview of trial structure in Belgium



The trial tracked payment and regularisation behaviour at several checkpoints relative to the due date (DD), including DD+3, DD+22 and DD+50, and defined multiple outcome measures: pure payment compliance (full payment, at least 99.5% of amount due), extended payment compliance (full payment, instalment plan or objection), partial payments, and objections and instalment plans separately. Key intervention components were the pre-due-date reminder letters, which differed in framing: the neutral letter restated the obligation; the deterrence letter highlighted enforcement risks; the support letter emphasised available solutions and assistance, such as instalment plans, and the acceptance letter acknowledged difficulties and encouraged contact. The trial also explicitly anticipated potential unintended consequences, such as increased early enquiries to FPS call centres due to confusion or concern and included a targeted analysis of complaints received to understand the types of issues created by different letters and which taxpayers reached out. The evaluation used logistic regression, interaction tests with rich socio-demographic and taxpayer-behaviour variables (age, gender, region, language, income type, amount due, solvency indicators, prior enforcement and declaration behaviour), and translated behavioural effects into estimated financial and operational impacts, including avoided recovery actions. See the figure below for an overview of the trail implementation timeline.

Figure 8 Implementation timeline for the Belgian trial, 2025-2026



2.4. Identifying similarities and differences in trial design

The three trials shared a core objective: using BI and messaging to improve tax compliance by addressing frictions, knowledge gaps and misperceptions rather than assuming deliberate non-compliance. All three improved fulfilment of existing obligations: FI declaration in Portugal, wage tax declaration and related payments in Austria, and PIT payment and regularisation in Belgium, while generating evidence for future interventions. Each also reflected its context: Portugal targeted Annex J submission among at-risk and new-resident taxpayers; Austria focused on first-time mandatory wage tax declarants; and Belgium aimed to encourage earlier payment and formal regularisation to reduce forced recovery and hardship.

The trial populations were all individual taxpayers identified through administrative data based on criteria established through the previously conducted surveys and trial inception workshops, with socio-demographic and behavioural variables used for subgroup analysis. Portugal's sample was defined by FI risk and residency changes; Austria's by parallel multiple wage sources and taxable income above the threshold; and Belgium's by outstanding PIT. Delivery was low-intensity and used existing channels: emails, portal alerts and a questionnaire in Portugal; early reminder letters in Austria; and pre-due-date letters in Belgium, with operational demands mainly falling on IT, mailing systems and, in Belgium, call centres.

All three trials used random allocation to control and treatment groups and drew on large administrative datasets. In Portugal's evaluation of the trial was complicated by randomisation imbalances, requiring propensity score matching. Austria also followed a RCT design but faced limits in linking arrears to specific tax years, so payment effects were interpreted more broadly in the analysis. Belgium benefited from a very large sample and detailed taxpayer data, allowing the administration to test whether the findings remained consistent across different analytical approaches and taxpayer groups. Overall, the trials provided a strong basis for causal inference in each case, while showing that intervention and evaluation designs had to be adapted to each administration's context. Table 2 provides an overview of the trials in all three countries and outlines key results:

Table 2 Trial overview

Country	Trial	Tax type	Compliance stage	Intervention	Key result
Portugal	Foreign income (Annex J) CIP & trial	PIT – foreign income via Annex J	Declaration of foreign income	Email + AT portal alert/questionnaire campaign during PIT window, followed by an email reminder to non-filers.	-Stage1 emails did not increase Annex J submissions once age and other taxpayer characteristics were taken into account. -Stage 2 email reminder worked: taxpayers who received it were more likely to submit Annex J, with the strongest effect among those who had previously received the deterrence message (**22,83% more submissions**). - The AT portal questionnaire was the most effective element of the intervention and strongly influenced whether taxpayers submitted Annex J.
Austria	Early reminder of mandatory wage tax	Wage tax – mandatory declaration	Declaration (and related payment behaviour)	pre-deadline reminder letters (early reminder; + payment info; + deterrence) vs control with only post-deadline reminder.	- Between treatment launch and the 30.06.2025. deadline on-time declaration rates were **29.7%**, **33.8%** and **34.7%** in the three treatment groups versus **5.1%** in control (**+24.6 to +29.6 percentage points**). - Post-deadline reminder receipt fell from **46.9%** in control to **25.3%**, **22.4%** and **20.9%** in the treatments (reductions of **21.6–26 pp**), and non-declaration by 08.09 dropped from **55.9%** to **28–32.6%**. All treatments showed slightly higher balanced/positive tax accounts by 13.02.2026 (not statistically significant).
Belgium	Pre-due-date PIT payment reminder (PDR)	PIT – payment of assessed liabilities	Payment / regularisation	Pre-due-date reminder letters (neutral, deterrence, support, acceptance) to taxpayers with PIT debt 12 days before deadline, compared to no PDR (status quo).	- PDR letters increased on-time and follow-up payment and **extended compliance** (full payment, instalment plans, objections), leading to an estimated **7,500 recovery actions avoided (-15%)** and **4,647 additional payment plans**, with indicative avoided taxpayer recovery costs of about €435.000 (7,500 x €58). Additionally tax authority recorded **€57** million being paid earlier by the due date with a further **€6,945** million still additionally paid by DD+50. -The trial thus both accelerated payments and moved more late payers into manageable repayment pathways, reducing costly enforcement both for taxpayers and the administration.

3. Key findings

This section synthesises the main findings across the three trials and focuses on the comparative lessons: what worked across contexts, why effectiveness varied, what each trial contributed most clearly, and how confident we can be in the evidence.

3.1 What worked across the trials

Across the three cases, timing mattered more consistently than message wording: taxpayers responded best when prompted before non-compliance had fully materialised.[3] Pre-deadline communication improved compliance. Austria showed the clearest effect: early reminders increased on-time wage tax declaration from 5.1% in the control group to 29.7–34.7% across treatment groups. Belgium's pre-due-date reminders brought PIT payments and formal regularisation forward, with the largest effects around the due date and continued positive effects before recovery. Portugal's Stage 1 initial email framings had limited independent impact, but the Stage 2 email reminder to non-filers significantly increased Annex J submission.

These effects also produced operational benefits for the participating tax authorities. Austria's early reminders reduced the share of taxpayers receiving a post-deadline reminder from 46.9% in the control group to 20.9–25.3% in the treatment groups and reduced reliance on automatic assessments. Belgium's reminders reduced unresolved debt positions and supported earlier regularisation through payments and instalment plans, resulting in an estimated 7,500 fewer debt items entering recovery, equivalent to a 15% reduction in recovery cases, and 4,647 additional instalment plans. Portugal's email reminder and portal tools supported more targeted engagement within the filing window, although delayed AEOI data meant actual FI compliance could not yet be verified.

Behavioural messaging included in the various letter and message variations added value in specific contexts, but it was not the primary driver across all trials. In Belgium, deterrence and support reminders outperformed the neutral reminder at earlier checkpoints, with deterrence more closely linked to full payment and support more relevant for instalment plans, partial payments and financially constrained taxpayers. Acceptance messaging did not add a clear benefit. In Austria, payment-information and deterrence variants performed better than the neutral reminder for on-time declaration, although all early reminders were effective to varying degrees. In Portugal, simplified, social-norm and deterrence email variants did not significantly increase Annex J submission after controlling for taxpayer differences, suggesting that email framing alone was insufficient for a complex FI declaration task.

Where taxpayers faced uncertainty or financial constraints, practical guidance was more important than simple reminders alone. Portugal provides the clearest example: the AT portal questionnaire was the strongest predictor of Annex J submission because it helped taxpayers determine whether they needed to file and how to do so. Belgium's support message played a similar role in the payment context by clarifying manageable pathways such as instalment plans and partial payments. Austria's payment-information reminder also suggested that explaining consequences and options can help taxpayers manage liabilities, although payment effects

[3] The trials did not investigate the effect of different reminder timings. This finding refers instead to the comparative pattern that introducing a communication before the relevant deadline produced more consistent effects than varying its wording or behavioural framing. It should not be interpreted as evidence that one sending date was more effective than another.

were more modest than declaration effects. The comparative lesson is that reminders work best for simple obligations, while more complex decisions require tailored guidance or support.

Overall, the three trials improved their primary behavioural outcomes: Annex J submission in Portugal, wage tax declaration in Austria and extended payment compliance in Belgium. Secondary outcomes were more mixed. Observed effects on payments were positive but smaller than declaration or extended compliance effects. Austria’s payment effects were difficult to isolate because account balances combined several liabilities. This pattern suggests that behavioural interventions are strongest when they address a clear, immediate action, and more conditional when the outcome depends on financial capacity, administrative complexity or later verification.

3.2 Factors for effectiveness

The effectiveness of the interventions was influenced not only by the nature of the obligation, but also by baseline compliance levels and taxpayers’ existing awareness of that obligation. Austria showed the largest effects, starting from a relatively low baseline of timely declarations among first-time mandatory wage tax declarants. For many taxpayers, the reminder acted as an initial information point, making them aware of a filing obligation they may not have previously understood. In Belgium, by contrast, most taxpayers were already aware of their payment obligation following receipt of their tax assessment notice. The behavioural challenge was therefore less about awareness and more about prompting action among taxpayers who had forgotten, delayed payment until the deadline, or were considering how to manage their liability. Portugal presented a different situation again. The intervention targeted taxpayers considered at risk of FI non-compliance, but some recipients may not have had FI to declare in the relevant tax year. As a result, the scope for increasing Annex J submissions was inherently more limited. These differences in starting conditions help explain why effect sizes varied across the three trials and underline the importance of considering baseline compliance and taxpayer awareness when interpreting the results. As complexity increased, guidance, segmentation and reliable data infrastructure also became more important to achieving and interpreting results. Target group characteristics also shaped outcomes. In Belgium, support messaging was particularly relevant for taxpayers facing financial or employment-related constraints, while deterrence was more closely associated with full payment among some groups. In Portugal, age, region, prior exposure and language shaped both portal engagement and Annex J submission: younger taxpayers were more likely to engage digitally, while older taxpayers were more likely to submit Annex J. In Austria, the target group was narrower and easier to influence because first-time mandatory declarants were identified through administrative data and faced a clear obligation.

Implementation quality and data infrastructure further affects both impact and confidence in the findings of the trials. Authorities in Belgium and Austria benefited from mature administrative processes, large, randomised samples and reliable outcome tracking. Belgium also used detailed checks on pre-intervention behaviour, data quality, complaints and subgroup differences. Austria’s trial was operationally simple and delivered through standard channels, with only minor documented deviations. The Portuguese authority operated in a more complex institutional setting, with several communication channels, analytical adjustments to address randomisation imbalances, and a structural delay verification of true compliance due to the way AEOI data is structured. These factors do not undermine the usefulness of findings for the Portuguese trial but needed to be addressed appropriately to ensure the validity of the findings presented.

The reasons behind the trial effects were similar but not the same in each country. Timely reminders worked best in Austria and Belgium because they encouraged taxpayers to act earlier and reduced the need for enforcement. Support and guidance were more important where taxpayers faced choices or uncertainty, such as Belgium’s repayment options and

Portugal's portal questionnaire. Deterrence messaging helped in Belgium and Austria, but it was less important than sending the messages at the right time and making the required action clear.

3.3 Country-specific learnings

Each trial offers a distinct contribution. Portugal demonstrates the value of digital guidance for complex declaration tasks: the portal questionnaire helped taxpayers translate a difficult FI obligation into a concrete filing decision. The Belgian trial shows the importance of measuring extended compliance rather than full payment alone, because instalment plans and partial payments can move taxpayers out of unresolved debt positions without increasing objections to tax assessments among targeted taxpayers. The Austrian trial provides the clearest evidence that a simple early reminder can produce large compliance gains when the target group is well defined, the obligation is clear and the required action is straightforward.

3.4 Limitations of the trials

Belgium's trial evidence was supported by a very large sample, balanced pre-intervention behaviour, rich covariates, consistency checks and analysis of operational outcomes such as payment plans, objections, complaints and avoided recovery actions. Austria's trial evidence was strong for declaration behaviour because randomisation, clear outcome measures and consistent timing patterns all pointed to a large treatment effect. However, Austria's payment findings were less certain because tax account balances could not be linked precisely to the relevant wage tax liability.

The Portuguese trial produced useful findings on the Stage 2 email reminder and portal questionnaire, but the results require careful interpretation due to randomisation imbalances and technical constraints leading to difficulties in attributing causality to trial results in relation to compliance outcomes. In addition, Annex J submission could be measured during the filing period, but the accuracy of FI reporting could not yet be verified because AEOI data arrives with delay and it needs to be worked on and analysed. Portugal's results are therefore best understood as evidence on reported declaration behaviour and engagement with guidance, rather than definitive evidence on verified FI compliance.

4. Implications for future work

This section turns the comparative analysis into guidance for future design, implementation and evaluation. It draws together core design principles, context-sensitive recommendations, implementation guidance, and priorities for future learning, explicitly reflecting differences in compliance stage, task complexity, and target groups.

4.1 Core design principles

Overall, contacting taxpayers before they become formally non-compliant improved outcomes at both declaration and payment stages, with the strongest effects where obligations were clear and tasks were simple. Early, preventive communication at the right compliance stage was consistently effective. In Belgium, pre-due-date payment reminders improved payment and extended compliance by approximately 11–14 percentage points at DD+3, shifted behaviour earlier bringing forward approximately €57 million in payments by the due date and were estimated to have avoided 41,276 warning letters and approximately 7,500 recovery actions, equivalent to a 15% reduction in recovery cases. In Austria, pre-deadline reminders increased on-time declaration by 24.6–29.6 percentage points and reduced post-deadline reminders. In Portugal, pre-deadline emails, portal alerts and reminders supported FI declaration, especially among late or hesitant filers. The subsequent email reminders further increased Annex J submissions, with the strongest effect among taxpayers who had previously received the deterrence message, at 22.83% more submissions.

Small behavioural changes can be effective when they use established administrative channels and are timed to key moments in the taxpayer journey. Simple, low-cost interventions embedded in existing processes also delivered substantial gains. Belgium added one reminder letter to the payment pipeline; Austria used standard postal reminders within the wage-tax timeline; and Portugal refined emails and portal alerts within an existing compliance improvement plan.

Future interventions should clarify obligations, highlight consequences and provide concrete options for action. Behaviourally informed content and tailored support mattered, particularly for complex tasks. In Belgium, support messages encouraged instalment plans and partial payments, while deterrence was more closely linked to full payment. In Austria, payment information and deterrence strengthened the basic reminder. In Portugal, the AT portal questionnaire was the strongest predictor of Annex J submission because it gave tailored guidance on whether and how to file.

Behavioural trials should be built around valid comparison groups, reliable administrative data and subgroup analysis so that effects can be interpreted confidently. Robust, data-driven design and evaluation were essential for judging effectiveness and guiding scale-up. Belgium, Austria and Portugal all used administrative data, clear hypotheses and regression-based analysis, with Belgium and Austria benefiting from stronger randomisation and Portugal using matching to address imbalances.

Future designs should tailor communication to taxpayers most at risk of non-compliance, while considering language, age, prior experience and access to support. Interventions should account for target-group differences and equity. Belgium showed that younger taxpayers, non-native speakers and financially constrained groups often benefited from support-oriented messaging. Austria targeted first-time mandatory wage-tax declarants whose obligation was clear but not always understood. Portugal found differences by age, region, digital engagement and language, including stronger submission among new residents receiving bilingual emails.

4.2 Context-sensitive recommendations

Future projects should therefore assess task clarity and complexity before relying on simple reminders: where complexity is high, added guidance such as portal tools, decision trees or support messaging may be needed. A key context-sensitive lesson is that simple reminders work best where obligations are clear and the required action is straightforward. Austria showed the largest effects because first-time mandatory declarants mainly needed timely awareness of a clear filing duty. Belgium produced strong but smaller gains, potentially because payment compliance involves debt management, instalment choices and financial constraints. Portugal's effects were more limited, likely because FI declaration requires taxpayers to recognise relevant income, understand Annex J and report it correctly.

Before adopting portal guidance or data-driven segmentation, administrations should confirm that their systems can support personalised communication, reliable tracking and high-quality evaluation. Digital infrastructure also shapes what can be transferred. Portugal's strong portal-questionnaire results depended on taxpayers being able to receive alerts, log in and access tailored guidance. Belgium's analysis relied on linking reminder letters to payment and regularisation data, while Austria's relied on merging declaration and account data.

Future projects should test tailored messaging through small, controlled experiments before scaling more complex segmentation. Tailored framing and segmentation should be introduced cautiously. The trial in Belgium showed that support and deterrence messages affected taxpayer groups differently, the trial in Austria showed that measurement of declaration and payment compliance in one trial may necessitate tailored trial designs, sample sizes and intervention messaging, and the trial in Portugal found promising but non-causal evidence on bilingual emails for new residents.

In practice, administrations should pre-assess three conditions before adopting similar approaches: the compliance stage and task complexity, the strength of digital, administrative and evaluation infrastructure and the organisation's capacity to manage communication variants, staff training and monitoring.

4.3 Implementation guidance

Future projects should involve operational staff and behavioural experts early so that interventions fit both taxpayer behaviour and administrative realities. The reports on the trial results in Belgium, Portugal and Austria offer practical implementation lessons on diagnosis, operational readiness, data quality and monitoring. At the design stage, authorities should link behavioural drivers to a specific compliance stage and target group. For these trials all authorities used the OECD ABCD framework, however other frameworks are also available for use.

Future trials should protect randomisation integrity, verify that messages reach the intended non-compliant taxpayers and document deviations clearly. During implementation, data checks are essential. Belgium only proceeded to outcome analysis after confirming comparable groups, pre-intervention behaviour, reminder timing, data completeness and implementation consistency. Austria used similar checks for declaration patterns and documented minor deviations, such as delayed letters or already-compliant taxpayers in the sample. Portugal corrected randomisation imbalances through matching and regression.

Implementation teams should also plan staffing and training for communication design, technical delivery, data extraction, monitoring and taxpayer support. Belgium prepared call-centre staff and analysed complaints to check for unintended confusion. Portugal showed the need for early coordination between behavioural and IT teams when portal or email formats are constrained. Austria highlighted postage costs and the potential to shift towards digital reminders to increase cost-benefit efficiency for the trial.

Authorities should prioritise timely pre-deadline communication, clear and supportive content, and reliable monitoring. They should avoid excessive message variants or segmentation before evidence supports them and should track not only primary outcomes such as declaration and payment, but also instalment plans, partial payments, objections, warning letters, recovery cases and complaints.

4.4 Future evaluation and learning

Future trials should collect outcome indicators matched to the compliance stage: on-time declaration, second reminders, full and extended payment compliance, instalment plans, partial payments, objections, and account balances. Belgium's trial shows the value of extended payment compliance, Austria's trial highlights declaration and follow-up reminder measures, and Portugal's trial looks at Annex J submission, portal engagement and, where possible, declared FI amounts. Using common indicators would make results more comparable across declaration and payment contexts.

Process indicators should also be tracked, including group composition, pre-intervention behaviour, implementation timing, data completeness and consistency, and response patterns. Belgium and Austria show the importance of these checks for causal confidence. Evaluations should also consider monitoring call-centre contacts, complaints and, for digital interventions, portal alerts, questionnaire responses and guidance-page engagement.

Future evaluations should also assess whether intervention effects persist beyond the immediate declaration or payment cycle. Where data availability permits, follow-up analysis should examine whether effects remain in subsequent tax years and whether interventions influence other compliance dimensions or later stages of the taxpayer journey, such as subsequent declaration, payment, regularisation or enforcement outcomes.

Methodologically, adequately powered RCTs with clear hypotheses are very powerful tools in this context especially when supported by regression analysis, subgroup testing and robust data checks. Future designs could test combinations of compliance stage and message framing and examine how declaration and payment interventions interact over time. To build cumulative evidence, administrations should share results through common templates, cost-benefit analyses and joint learning forums. The Belgium–Portugal–Austria BI learning network established through the project should also be maintained through regular exchanges, allowing the three administrations to share experience from new BI initiatives, implementation challenges, evaluation approaches and emerging results. Priorities include improving data infrastructure, testing digital and analogue communication, linking declaration and payment strategies, and validating reported compliance once better data become available.

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