Project SHIELD: 90-Day Pilot Blueprint

An implementation plan for a 90-day pilot of a privacy-preserving, employer-facing right-to-work verification system.

1. Objective of the Pilot

The objective of this 90-day pilot is to test the feasibility, security, and usability of a decentralized system for verifying an individual's right to work in the UK. The pilot will assess a model where employers can confirm eligibility through a secure API call, using a Verifiable Credential held by the individual, without creating a national identity database or tracking citizen activity. The goal is to prove a more efficient and privacy-respecting alternative to physical document checks and centralized digital identity schemes.

2. Target Sectors

The pilot will focus on three sectors with high volumes of eligibility checks and diverse user needs:

- **NHS Administration:** Onboarding of non-clinical administrative and support staff.
- **University Enrolment:** Verification of international students' right to study and work part-time.
- **Local Authority Housing:** Confirmation of eligibility for housing applicants.

3. 12-Week Pilot Timeline

Week(s)	Key Tasks & Milestones
Weeks 1–2	**Setup & Scoping** - Finalise participation agreements with partner organisations. - Establish technical working group with all stakeholders. - Define precise specifications for the Verifiable Credential (VC) schema and API endpoints.
Weeks 3–4	**Component Development** - **Government:** Develop secure portal for issuing digital Right-to-Work VCs. - **Technical Partner:** Build the reference mobile wallet for holding VCs and the employer-facing verifier application/API. - **Auditors:** Begin source code review and architectural analysis.
Weeks 5–6	**Integration & Sandbox Testing** - Issue test VCs to a closed group of volunteers. - Employers conduct test verifications against the sandbox environment. - Civil society partners test inclusion and accessibility pathways.
Weeks 7–8	**Pilot Go-Live & Onboarding** - Deploy production environment. - Onboard participating employers and their HR teams. - Distribute public-facing documentation and support materials. - Begin issuing live VCs to a controlled cohort of new hires/applicants.
Weeks 9–11	**Live Operation & Monitoring** - Conduct live verification checks as part of standard business processes. - Collect data against core pilot metrics. - Hold weekly check-in calls with all partners to address issues. - Independent auditors monitor the immutable audit log for anomalies.
Week 12	**Wind-down & Analysis** - Cease live pilot operations. - Analyse collected metrics and user feedback. - Auditors and civil society partners submit their final reports. - Draft a comprehensive final report with recommendations for policy and potential future phases.

4. Roles and Responsibilities

- **Government (Home Office):** Acts as the trusted **Issuer**. Responsible for verifying an individual's immigration status and issuing the corresponding Right-to-Work Verifiable Credential. Will not have access to verification events.

- **Employers / Organisations:** Act as **Verifiers**. Responsible for using the provided API or application to check the validity of a credential presented by a candidate. Will only receive a cryptographic "Yes" or "No" response.

- **Individuals:** Act as **Holders**. Responsible for storing their credential in a secure digital wallet of their choice and presenting it for verification when required.

- **Independent Auditors:** Responsible for continuous security testing, code review, and monitoring the immutable audit log to ensure the system is used as specified and is not vulnerable to attack.

- **Civil Society Organisations:** Responsible for representing the public interest, monitoring for potential harms or biases, and ensuring the inclusion and accessibility safeguards are effective.

5. Core Pilot Metrics

- **Verification Speed:** The end-to-end time from the initiation of a check to the receipt of a valid response. (Target: < 3 seconds).

- **Employer Adoption:** The percentage of participating HR teams actively using the system for all new verifications. (Target: > 90%).

- **Audit Frequency:** The number of queries and reviews conducted against the immutable audit log by independent auditors. (Target: Continuous monitoring).

- **Worker Satisfaction:** Qualitative and quantitative feedback from individuals using the system, focusing on ease of use, trust, and sense of control. (Target: > 90% satisfaction).

6. Partner Onboarding Process

New organisations can join the pilot by following this process:

1. **Expression of Interest:** Submit an application via the contact instructions below.

2. **Vetting & Agreement:** The pilot steering committee will review the application. Approved partners will sign a Memorandum of Understanding (MOU) outlining roles and data handling.

3. **Technical Onboarding:** The technical partner will provide API keys, documentation, and a dedicated sandbox environment for the new partner to integrate and test their systems.

4. **Training:** The pilot team will provide virtual training sessions for the partner's relevant staff (e.g., HR managers).

5. **Go-Live:** Once testing is complete and staff are trained, the partner will be transitioned to the live pilot environment.

7. Safeguards

- **Inclusion (Non-Digital Access):** A parallel paper-based or in-person verification route will be maintained by the Government Issuer for individuals without access to a smartphone or who opt not to use the digital system. This route will be explicitly signposted as an equal alternative.

- **Legal (Sunset Clause):** The legal agreement for the pilot will contain a sunset clause, stipulating that the system will be decommissioned and all operational data securely deleted within 30 days of the pilot's conclusion, unless a new, publicly announced framework is established.

- **Legal (Use Lock):** The system is architecturally and legally "locked" for the sole purpose of right-to-work verification. Any attempt to use the credentials or infrastructure for another purpose (e.g., law enforcement access, commercial services) is explicitly forbidden and would be technically unfeasible without a complete and public re-architecting of the system.

8. Sample Pilot Invitation

Subject: Invitation to Participate in the Project SHIELD Right-to-Work Verification Pilot

Dear [Partner Name],

We are inviting a select group of organisations to participate in a 90-day pilot of Project SHIELD, a new system for verifying right-to-work status in the UK.

Project SHIELD is designed to be a secure, fast, and privacy-preserving alternative to manual document checks. It allows employers to confirm a candidate's eligibility with a simple digital check, without needing to handle sensitive personal documents or connect to a centralized government database.

Participation in this pilot offers an opportunity to shape the future of compliance technology in the UK and reduce the administrative burden on your HR teams.

If you are interested in learning more about this initiative and how your organisation can be involved, please see the contact and submission instructions attached.

Sincerely,

The Project SHIELD Pilot Team

9. Participation and Contact Instructions

Organisations interested in participating in the pilot, as well as auditors and civil society members wishing to contribute to oversight, are invited to submit an expression of interest.

Please direct all enquiries and submissions to:

Email: `pilot-contact@projectshield.gov.uk` (this is a placeholder)

Subject Line: "Project SHIELD Pilot: Expression of Interest"

Submissions should include:

- Organisation Name and Sector
- Primary Contact Person
- A brief statement (max 150 words) on why your organisation is interested in participating.

This document is intended for public information and is subject to revision.