

## Interoperability Services Platform

### Portugal

GENERAL INFORMATION	
Name of the organisation	Instituto de Informática, I.P.
Type of organisation	Social Security Organisation
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Web page	<a href="https://www.seg-social.pt">https://www.seg-social.pt</a>
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Topic of the good practice	Information provision on registration and payment of social contributions
Geographical focus	Nation-wide
Duration	10/1/2016 - ongoing
Summary of the good practice	<p>The Social Security Interoperability Services Platform (PSi) allows employers' IT systems to be directly and securely integrated with the social security system. By making various web services available, the PSi facilitates the communication of labour information and the submission of remuneration statements, thus reducing the administrative burden and increasing companies' operational efficiency. Since its implementation, PSi has promoted more efficient management of employee-related processes, contributing to the modernisation and digitalisation of public services and the social security system in Portugal.</p>
OBJECTIVES AND ACTIVITIES	
Background/context	<p>► The challenge addressed was that many employers and HR systems had to interact with the social security system via manual or semi-manual means: manual data</p>


<p>What challenge, need or gap were you trying to solve or respond to?</p> <p>Why was this issue relevant or urgent in your context (sector, region, country)?</p>	<p>entry, disparate interfaces, duplicated effort, errors, delays, and a lack of real-time feedback. The systems that were able to do it automatically would have to do it via web scrapping on the interface. This gap was particularly acute in the context of digital transformation of public services, where citizens and businesses expect efficient, seamless, interoperable systems.</p> <p>► In the Portuguese context, ensuring compliance with labour and social security rules, while also reducing administrative costs and processing delays, made it urgent to provide a platform where entities could integrate directly with the social security system via safe webservice connections.</p> <p>Also, Portuguese governments of the last decades have been pushing for interoperability and digital services via policy and legal initiatives that public entities must comply to.</p>
<p><b>Objectives</b></p> <p>What were the main goals of this practice (e.g. better compliance, faster processing, improved worker protection)? (Please limit to three)</p> <p>Who or what were these goals intended to help or change? (Please limit to three)</p>	<p>► The aim of this practice is to:</p> <ul style="list-style-type: none"> <li>• Improve regulatory compliance by ensuring timely and accurate submission of labour's bond (vinculos) and remuneration information.</li> <li>• Accelerate processing and reduce latency in communications between employers and the social security system.</li> <li>• Reduce administrative burden and costs for employers and the social security system, thereby increasing efficiency.</li> </ul>
<p><b>Main activities</b></p> <p>What were the main steps or actions you carried out to put the practice into effect?</p> <p>Were any tools, materials, partnerships, or processes created?</p>	<p>► The main steps to put this practice into effect include:</p> <ul style="list-style-type: none"> <li>• Mapping and specification of required web services (vínculo (bond) communication, contract alteration, remuneration declarations, payment documents, etc.).</li> </ul>

	<ul style="list-style-type: none"> <li>• Developing and publishing technical documentation, WSDL / YAML / interface specifications, and guidelines for integration.</li> <li>• Setting up and maintaining two environments: a “Quality / Test” environment and a “Production” environment.</li> <li>• Engaging with software vendors, HR system providers, employer associations to pilot and onboard them.</li> <li>• Running internal training and creating support channels.</li> <li>• Monitoring usage, error rates, performance, and iteratively improving the platform.</li> </ul>
<b>Funding/organisational resources</b>	The platform is fully funded by the Social Security / governmental budget.
<b>PARTICIPATION</b>	
<b>Stakeholders involved</b>  Organisations or entities actively contributing to the design, implementation, monitoring, or support of the good practice (e.g. labour inspectorates, social security institutions, trade unions, employers’ associations, or other).	▶ The platform is actively maintained by the Informatic Institute of Social Security and we do it in collaboration with our colleagues at the Social Security Institution. We currently receive important feedback from HR / payroll software vendors (private sector) who integrate PSi into their systems.
<b>Target groups</b>  Main groups or categories that the practice is directly aimed at, who should receive its services or who engage with it (e.g. employers, mobile or posted workers, labour inspectors and social security officers, or other).	▶ The main target groups are: <ul style="list-style-type: none"> <li>• Employers / companies (as users of PSi),</li> <li>• HR / payroll systems and their vendors.</li> </ul>
<b>Final beneficiaries</b>  Individuals or groups that ultimately benefit from the outcomes of the practice, even if they are not the direct target or user (e.g. mobile or posted workers, vulnerable workers at risk of exploitation, employers benefiting from clearer rules or reduced admin burdens, or other).	▶ The final beneficiaries of the practice are: <ul style="list-style-type: none"> <li>• Workers / employees — because their employment records and remuneration are duly communicated, avoiding delays or inconsistencies.</li> <li>• Employers — benefiting from the reduced administrative burden and fewer errors.</li> </ul>

	<ul style="list-style-type: none"> <li>• The public administration / the social security system — lower operational cost, less manual validation work.</li> <li>• Society at large — through a more efficient, transparent, and modern public administration.</li> </ul>
<b>GOOD PRACTICE CRITERIA</b>	
<p><b>Achievements and outcomes</b></p> <p>What specific results did the practice achieve? (e.g. How many workers or employers were reached, number of publications created? What processes became faster?)</p> <p>What kind of broader benefits did it bring? (e.g. Did it improve understanding of rights and obligations, enhance cooperation between authorities, or reduce legal uncertainty and inconsistent application of rules?)</p>	<ul style="list-style-type: none"> <li>▶ We've reached up to 50% of all Portuguese employer entities so far. Consequentially, that includes all of their workers.</li> <li>▶ Recently, we added the following services: "Consult Workers," "Communicate Employment Contract," "Terminate Contract," "Modify Contract," "Remuneration Declarations," "Issue Payment Documents," "Consult Payment Documents," "Cancel Payment Document," and "Consult Payment Receipts." – and we created technical documentation for all of them.</li> <li>▶ This has resulted in:             <ul style="list-style-type: none"> <li>• Improved coordination between entities</li> <li>• reduced legal uncertainty</li> <li>• enhanced data reliability</li> <li>• fewer disputes or complaints caused by communication errors</li> <li>• advancement of the digital modernization of the Portuguese state administration</li> </ul> </li> </ul>
<p><b>Cost effectiveness</b></p> <p>How did you keep costs low while still achieving results? (e.g. Did you reuse existing tools, automate processes, or share resources across teams?)</p> <p>Can you show that the outcomes were worth the investment? (e.g. Did small</p>	<ul style="list-style-type: none"> <li>▶ Many components were repurposed or built on existing infrastructure (reuse). We also always try to utilize the service which is already available on the interface and adapt it to the webservice. We try to advance automation by replacing manual operations and share resources (infrastructure, support, maintenance) from all departments internally.</li> </ul>

<p>changes lead to big improvements, or were expensive tools avoided?)</p>	<p>► Since the investment in this development is done via the state budget, we cannot demonstrate outcomes as requested. Private partners report avoidance of duplicated systems or multiple point integrations with high maintenance costs. This relatively incremental investment yielded high gains in efficiency and reductions in operational cost (less rework, fewer staff devoted to manual error correction) for them.</p>
<p><b>Transferability</b></p> <p>What are the key features that make this practice work well? (e.g. a digital platform, clear guidelines, a joint inspection process, or strong coordination)</p> <p>What would another country or organisation need to make this work for them? (e.g. certain laws, IT systems, or staff training)</p>	<p>► Key features for the practice to work well are:</p> <ul style="list-style-type: none"> <li>• standardized web services architecture (WSDL / YAML);</li> <li>• clear documentation;</li> <li>• separate testing / production environments;</li> <li>• version governance;</li> <li>• technical support;</li> <li>• involvement of software vendors;</li> <li>• flexible systems for adaptation.</li> </ul> <p>► For another country or organization to replicate, they need:</p> <ul style="list-style-type: none"> <li>• a legal basis permitting integration between entities and the public system as the most important feature;</li> <li>• compatible IT infrastructure (web services, TLS security, authentication frameworks);</li> <li>• institutional capacity to manage the project;</li> <li>• partnerships with local HR system vendors;</li> <li>• support and maintenance resources;</li> <li>• interoperability policies.</li> </ul>

<p><b>Sustainability</b></p> <p>How is the practice sustainable from a social, financial or environmental perspective?</p> <p>What makes this practice able to continue over time? (e.g. It is now part of regular work or has been built into law or procedures?) and how are you making sure it lasts beyond the pilot or project phase?</p>	<ul style="list-style-type: none"> <li>▶ The practice has become part of the normal operations in the social security system, not just a pilot project. It is maintained through regular state budgetary resources, dedicated teams at Informatic Institute and institutional governance.</li> <li>▶ Ongoing evolution (new versions, adaptation to legislative changes) ensures that the system remains relevant and up-to-date. Use of maintenance practices, monitoring, and continuous improvements prevent obsolescence. There is a potential for expansion and inclusion of additional services in the future and increasing its value over time.</li> </ul>
<p><b>Innovativeness</b></p> <p>What makes this practice new or different in your field or country? (e.g. Is it the first of its kind, or does it combine actors who don't usually work together, or activities not performed before?)</p> <p>How does it improve older or less effective approaches? (e.g. By reaching more people, using data better, or simplifying complex procedures)</p>	<ul style="list-style-type: none"> <li>▶ It is innovative because it introduced into the Portuguese context a direct integration between HR and remuneration management systems and the public social security system via web services — something that was previously highly fragmented, by web scrapping or manually. It also brings together public and private actors (social security entities, employers, software vendors) in an interoperable network.</li> <li>▶ Recent services (payment documents, cancellations, receipts) expand the scope beyond mere contract communications, showing continuous evolution and innovation. This practice improves older approaches (manual interfaces, independent portals) by enabling integration into users' internal systems, reducing duplication, automating processes, and by providing real-time feedback.</li> </ul>
<p><b>Digitalisation</b></p> <p>What kind of digital tools or platforms were used in this practice? (e.g. online portals, automated case tracking, data sharing, digital databases or other)</p> <p>How did these tools help in reaching your goals? (e.g. Did they save time, facilitate access to data in real time, reduce errors, help detect fraud, or improve coordination between authorities?)</p>	<ul style="list-style-type: none"> <li>▶ Multiple tools were used in this practice: <ul style="list-style-type: none"> <li>• web services (SOAP / WSDL / YAML) for system-to-system communication</li> <li>• technical documentation tools and published specifications (technical documents for each service).</li> <li>• test / quality environment and a production environment to distinguish test calls from real ones. automated interfaces which enable HR / payroll</li> </ul> </li> </ul>



systems to integrate without constant manual intervention.

These tools help save time, reduce errors and provide real-time feedback (communication status). They facilitate coordination among entities and ensure data integrity.