Anti-fraud Tool Unit, Spain

Title of the policy or measure (in English)	Anti-fraud Tool Unit[i]
• Country	Spain
• Sectors	All
• What groups are targeted by the measure	- Labour inspectors (directly targeted) -Companies involved in UDW (indirectly targeted) - Workers involved in undeclared work and partial UDW[ii] (indirectly targeted) - Bogus self-employed (indirectly targeted)
• Purpose of measure	Deterrence: improve detection
• Short sentence summarising the measure	The Anti-fraud Tool Unit is a specific unit within the National Anti-Fraud Office. The Unit has designed a statistical tool to predict fraud in employment and social security, guiding the Labour and Social Security Inspectorate (ITSS) to identify companies with a higher probability of engaging in UDW or carrying out other social security fraud.
Background	
• Background context driving the implementation of the measure	Spain has a long tradition of cooperation among institutions to tackle undeclared work. This cooperation has been supported by technological solutions that facilitate the sharing and analysis of data. The Anti-fraud Tool Unit develops the existing IT tools using data matching and data mining to create a comprehensive risk assessment system in the field of UDW and other Social Security infringements and to raise the efficiency of the investigations[1].
• When was the measure implemented? (including start date and end date/ongoing)	2015 – ongoing
• Names(s) of authorities/bodies/organisations involved	Labour and Social Security Inspectorate, ITSS under the auspices of the Ministry of Work, Migration and Social Security.
• Scope of the measure (a pilot project, nationwide, regional wide)	Nationwide
• Type of (policy) measure	Tool

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[1] Learning Paper from the Thematic Review Workshop on Risk Assessments for More Efficient Inspections 14 and 15 June 2018, Madrid, Spain.

• Key objectives of the measure	**General objectives:** - Detect situations of undeclared work, (for example, fraudulent part-time contracts and bogus self-employment) and social security fraud; - Address these situations through extensive and intensive controls; - Improve the efficiency of inspections. **Specific objectives:** - The early detection of new fraud situations, taking into account that it increases the level of control actions needed; - Adequate facilitation and management of the existing data in a number of institutions in a way that facilitates and improves the research activity by the ITSS;[iii] - Define patterns of fraud in employment and social security, and design statistical models to detect it; - Support the planning of the activity and the performance of the ITSS.
Specific measure	
• Description of how the measure operates in practice	The Anti-fraud Tool Unit includes the following activities[iv]: **The ITSS Central Services execute the statistical fraud models.** This is carried out through two methods: a) ***Implementation of models based on "business rules",*** designed by the team of Inspectors and sub-inspectors assigned to the Anti-fraud Tool Unit. The role of business rules is to identify potential fraud cases. For example, one rule states that if one person is receiving income (according to Tax Agency data) but s/he is not registered with the social security, then it is most likely that s/he is engaging in UDW. b) ***Data mining.*** Massive amounts of information from different sources, including Social Security and the Treasury, is analysed in order to unveil new fraud patterns which can serve to detect fraud cases and create new business rules. For the moment data mining has been mainly applied to the retail sector, to detect fictitious companies and bogus self-employment. **Identification of companies and subjects to be inspected:** The fraud models and data mining select the companies/self-employed workers to be inspected, which are included in the yearly plans for inspection. **Inspection:** Information on those to be inspected is loaded into the software of ITSS (called INTEGRA). This information facilitates the inspections. The heads of the Regional Inspectorates assign inspections to officers. Inspections are carried out along with those suggested by other sources, such as complaints received by the Inspectorate. **Feedback from inspection and improvement of the tool:** Upon completion of investigations, information on the results is uploaded to the system to **validate the effectiveness of the models.** The Anti-fraud Tool Unit analyses the effectiveness of the "business rules" and data mining. This enables the modification of rules and data mining approaches, the **detection of new trends of fraud** (geographical areas, characteristics of companies,

	activity sectors, economic damage, etc.), the **redirection of the inspection activity** and the **follow-up of efficiency indicators.** The whole cycle (from the creation of new business rules to the assessment of its performance after the inspections take place) can take between 12 and 15 months.
• What resources and other relevant organisational aspects are involved?	The Anti-fraud Tool Unit has been developed with the human and material resources of the ITSS with no additional specific resources used so far. It is expected though that, in the framework of the recently approved Director Plan for Decent Work 2018-2020, additional resources will be devoted to the Anti-fraud Tool Unit.
• What are the source(s) of funding?	Funding comes from the ITSS i.e. the budget of the central government through the Ministry of Work, Migration and Social Security.
Evaluation and outcome	
• Has the measure achieved its objectives?	This is an ongoing project. Effectiveness and efficiency of inspections are increasing. Further improvements are expected as the tool is in a process of constant development. This is due to two reasons. First, the tool design includes feedback mechanisms to improve its performance. Second, the ITSS Master Plan for decent work 2018-2019-2020 and Strategic Plan 2018-2020[v] includes measures for further improvement, such as visualisation of fraud patterns, improving the matching of available data or harmonising the format of data from different public sources.
• Assessment method (including indicators used to measure its impact), and the outputs and outcomes achieved	- The design of the tool follows a process which includes feedback to evaluate its own results and thus continuously improve its performance. The complete period of feedback takes between 12 and 15 months as described above. - There has been an increase in the effectiveness and efficiency of inspections (see table) to detect UDW and other infringements over recent years and especially since 2016 when the tool was initiated. However, it should be taken into account that other measures have been implemented simultaneously, such as the improvement of inter-institutional cooperation that has led to the creation of the National Anti-fraud Office. Thus, the impact of the Anti-fraud Tool Unit on the improvement of the efficacy and efficiency of the labour inspections cannot be easily isolated. {{TABLE}} Total Outcome: Between 2012-17, 506 274 UDW jobs were detected through inspections. Source: Strategic Plan of Labour and Social Security Inspectorate 2018-20. Published in the Official State Bulletin, 19 April 2018. - In addition, the Strategic Plan (2018) provides information about other outcomes achieved by the Labour Inspectorate, such as the number of irregular temporary contracts transformed into open-ended ones (from 74 955 contracts in 2012-13 to 175 359 contracts in 2016-17). - Also, it is important to note that because of the risk of being detected by the Inspectorate, people have been encouraged to regularise their

Period	Number of Inspections	UDW Jobs detected	Efficiency Ratio (UDW jobs per inspection)
2012-13	438 839	170 941	0.39
2014-15	397 001	161 658	0.41
2016-17	319 740	173 675	0.54

	situation, which is an important indirect effect of the coordinated efforts to detect undeclared work and the increased effectiveness perceived.
• What are lessons learnt and the key conditions for success?	- As suggested by the Spanish Anti-fraud Office, it is important for on the ground inspectors to use more integrated IT and communication systems (e.g. providing inspectors with use of a tablet-type device to access labour and security databases, in order to obtain real-time information during inspections)[vi]. - In recent years technological development in IT has enabled the creation of data science tools that have made a difference to tackling complex phenomena such as UDW. The potential of these tools partially relies on the amount of data that can be analysed and on the combination of different data sources. Multiple data sources are very useful to analyse multidisciplinary complex problems. This analysis facilitates a more adequate planning of actions. - The combination of several sources enables a more accurate analysis of multidimensional problems, as well as requiring the cooperation of different organisations that provide their data. Thus, the existence of inter-institutional cooperation is often a requirement for the development of these tools.
• Level of transferability (e.g. other countries/groups/sectors)	The Anti-fraud Tool Unit is fully transferable to other countries. The concept of a predictive tool that uses existing data to guide labour inspections can be developed in other countries. In addition, concrete elements of the tool, such as the programming codes[vii], could also be shared and used by other countries to create their own software. This could serve at the outset to enable faster development of already existing tools and later in the future to converge towards the creation of an IT tool at the EU level. This would be especially useful to improve detection in border areas or in transnational fraud structures.
Additional information	
• Contacts	Director of the National Anti-fraud Office Email address: itsssgit@mitramiss.es Telephone: +34 91 363 11 60 / 61
• Useful sources and resources	**Useful web links:** - Information on the National Anti-fraud Office, http://www.empleo.gob.es/es/organizacion/subsecretaria/contenido/OM111.htm, **Useful sources:** - Law 23/2015, July 21st, on the Labour and Social Security Inspectorate System. - Royal Decree 192/2018, April 6th, approving the Statute of the State Agency of the Labour and Social Security Inspectorate. - Resolution of 27 July 2018 that approves the Director Plan for Decent Work 2018-2019-2020 (Resolución de 27 de julio de 2018, de la Subsecretaría, por la que se publica el Acuerdo del Consejo de Ministros de 27 de julio de 2018, por el que se aprueba el Plan Director por un Trabajo Digno 2018-2019-2020)
• Metadata and key words for online search	Spain; Anti-fraud tool Unit; inter-institutional cooperation; Herramienta de Lucha contra el Fraude; ITSS; Plan Director por un trabajo digno 2018-2020; data mining; risk assessment tool; predictive tool; business rules; business models; social security infringements; INTEGRA; fraud models; fraud trends

[i] Although the Anti-fraud Tool has been designed to tackle UDW and other social security infringements, the focus in this fiche is on undeclared work.

[ii] Part-time contracts that are in fact full-time jobs.

[iii][iii] The data comes from various sources, among which are the Treasury of Social Security, Public Employment Service, Tax Agency, Law Enforcement Agents.

[iv] Presentation "Risk Assessments and Planning", Begoña Buces Gogenola. UDW Platform Thematic Review Workshop on Risk Assessments. State Agency of the Labour and Social Security Inspectorate. Madrid, 14 June 14 2018.

[v] Strategic Plan for Labour and Social Security Inspectorate 2018-2020 (Plan Estratégico de la Inspección de Trabajo y Seguridad Social 2018-2020). Ministry of Employment and Social Security. April 2018.

[vi] Learning Paper from the Thematic Review Workshop on Risk Assessments for More Efficient Inspections 14 and 15 June 2018, Madrid, Spain.

[vii] Following identification of "business rules", software is programmed to merge and analyse appropriate data to identify companies at risk of fraud. The programming codes could be shared with other countries.