Federal Public Service
Social Security

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EUROPEAN SOCIAL INSURANCE PLATFORM

Webinar

AI and Social Protection in the EU: Navigating Challenges and Seizing Opportunities

5th of June 2024

Artificial Intelligence (AI) has transitioned from niche technology to a mainstream tool across various sectors, heralding significant changes in how services are designed, delivered and managed. The integration of AI in the field of social protection may result in enhanced efficiency and timeliness, improved the provision of services to individuals, and better resource management. However, despite its widespread adoption, there remains a nebulous understanding of the specific implications of the European AI Act on social security systems. This ambiguity requires a structured dialogue to acquire a clearer understanding of the AI Act's impact and to examine strategic pathways for innovation among organisations providing social protection across the EU.

The objective of this webinar, organised in collaboration with the European Social Insurance Platform (ESIP) and the Belgian Federal Service of Social Security under the auspices of the Belgian EU Presidency of the Council, aimed to provide clarity and strategic insights into the integration of AI within social protection systems. The goal was to address the pressing challenges posed by regulatory frameworks, explore opportunities for innovation and cooperation, and highlight potential difficulties in the implementation of effective AI systems to ensure that AI contributes positively to social welfare current objectives and future needs.

This webinar started with a Keynote Speech from Martin Ulbrich (Policy Officer DG CONNECT & Contributor to the AI White paper and the AI Act) presenting the European AI Act and its implications for national policies and the prioritisation of user-experience driven AI implementation. It has been followed by the first panel "Promising practices of AI application for Social Protection" where we talked about the best practices & case studies from EU countries as well as the exploration of implementation plan and implemented examples within social protection organisations. The second panel discussed "What can be done on the European level to further support innovative AI solutions applied to social protection?" where it was the occasion to question the regulatory framework and his gaps. It was also the occasion to discuss the opportunities for further cross-border collaboration. We ended with some closing remarks by the President of ESIP.

Martin Ulbrich's keynote speech

The keynote speech of the webinar outlines AI regulation in Europe, it focused on the AI Act and its categories of risk. Proposed in 2021, the AI Act is a regulatory framework that categorises AI applications into four risk levels: minimal or no risk, low risk, medium risk, and high risk, with most companies falling into the minimal or no risk category and few applications being prohibited.

The AI Act applies across all sectors to avoid conflicting legislations, prohibiting social scoring, biometric categorisation, and real-time remote biometric identification due to privacy and discrimination concerns. Facial recognition technology, while generally restricted, can be exceptionally allowed while emotion recognition is forbidden in workplaces and educational

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institutions but allowed for medical and safety reasons. High-risk AI use cases must meet quality criteria, and AI in safety components of product subject to third-party approval before being admitted on the market requires additional testing and approval before sale.

AI systems used for certain public services, including healthcare and social security benefits, fall under the Act's high-risk category, necessitating transparency and risk assessments. The importance of assessing AI's impact on fundamental rights is emphasized. The European Union's AI office can designate large general purpose AI systems as "very important systemic risk," requiring developers to test and revise systems to prevent harmful behavior.

The AI Act represents a significant regulation throughout Europe, emphasizing AI governance and risk management. Proposed by the European Commission after extensive discussions starting in 2018, it is a pioneering legislative effort with a scope encompassing minimal to high-risk AI applications. Public services using high-risk AI must meet stringent quality criteria, and transparency is required for chatbots and deep fakes. New provisions address large-scale systems posing systemic risks.

A new European AI Office will oversee general-purpose AI, while national authorities manage specific applications. The Act will be published around mid-July and enter into force by mid-August, with certain prohibitions taking effect first. A fundamental rights impact assessment is required for relevant public operators, with a grandfathering clause allowing existing systems to continue for up to four years post-implementation, provided no substantial modifications are made. The AI Act aims to balance regulation with innovation, promoting AI's benefits while safeguarding against its risks, establishing a comprehensive framework for consistent AI governance in Europe.

Panel 1: Social Security providers' showcasing use of Artificial intelligence

Some implementations of AI tools in social security organisations

ESIP members have be given the opportunity to showcase the actual implementation of AI within their organisation, while also addressing the difficulties encountered in this process. **Vincenzo Di Nicola** from the Italian Social Security and Welfare Administration (INPS), explains the rapid digitalisation triggered by the COVID-19 pandemic. Amidst the pandemic, the Italian administration was confronted with a significant surge in verified electronic communications from individuals, which has risen twofold from 3 million in 2019 to 6 million in 2023, all while managing to maintain the same or less staff. In 2021, they introduce an AI system to handle the increase in workload. This system utilises advanced technologies such as GPT-2 and Google's BERT to analyse, classify, and direct emails to the relevant departments. This AI-powered system greatly improves reaction times and reduces the stress on staff, freeing them from repeated duties. The government's creative use of AI in public services has been internationally acclaimed, resulting in the administration receiving a UNESCO award for their performance in its effort to meet the UN's 17 Sustainable Development Goals (SDGs).

Di Nicola also emphasises current AI initiatives focused on enhancing customer service, automating data entry, and providing tailored assistance. For example, AI proposes benefits to individuals, guaranteeing that they are informed about the social protection they are entitled to.

Alex Corra, a Senior Policy Advisor in Law & Ethics at the Ethics Centre of the Dutch Social Insurance (SVB), emphasises the careful yet forward-thinking strategy employed in the implementation of AI in their operations. SVB still primarily employs conventional business rule algorithms and has been investigating the use of more sophisticated, machine-learning AI systems over the course of the last three years. A prominent effort is centred around developing an AI based solution for forecasting changes in individuals' living conditions in order to proactively administer benefits and reduce administrative complexities. The aim is for the SVB to improve the accuracy of benefits by providing notifications to verify any modification in order to align them with real-life circumstances. However, this project is still in a development stage due to the desire to be compliant with relevant regulations both at EU and national level. Additionally, there is a project in development aimed at the creation of an AI assistant that enables employees to navigate a complicated and vast knowledge base without receiving explicit answers, but instead is aimed at asking relevant questions back that can help an employee make appropriate decisions. The focus on using the AI to ask questions instead of simply giving answers is part of an effort to counter the risks of automation bias, de-skilling, while promoting human accountability and analytical thinking.

Alexander Zeiss, the Head of Shared Service Centre Artificial Intelligence at the Austrian Social Insurance (DVSV), explores the profound influence of AI on optimizing reimbursement procedures and enhancing communication within vast organisations. In 2019, a notable project was initiated to automate the sorting of emails by training an artificial intelligence model using a dataset of 100,000 past emails. This effort attains a precision rate of 80%, greatly improving efficiency by automatically directing emails to the appropriate departments. Another notable project in 2020 is to simplify the reimbursement procedure for elective medical appointments. The organisation turns handwritten data into machine-readable formats by building an application that employs 13 machine learning models to digitise and recognise relevant information from varied documents. The current AI system is capable of handling a monthly workload of 500,000 to 700,000 cases, resulting in a substantial improvement in efficiency and an annual increase in the number of cases processed.

Furthermore, Zeiss explores a cutting-edge outlier detection application specifically developed for the analysis of accounting data. This tool represents a substantial improvement from the manual examination of tiny sample percentages to the automatic, thorough analysis of all data, detecting and evaluating abnormal trends in accounting processes.

The Ethics surrounding the utilisation of AI and the significance of Human Decision-Making

Corra underscores the significance of maintaining a harmonious equilibrium between human discernment and machine-based decision-making processes. Striving for positive complementarity between human and machine when implementing AI technology. This entails acknowledging the necessity of supplementing human attributes such as creativity and ethical awareness with the data management capabilities of machines. In order to prevent automation bias, SVB for instance plans to incorporate a combination of AI outputs and random cases, in order ensure that evaluators maintain a critical mindset and do not unequivocally adhere to AI suggestions. Corra also explores the wider

ethical implications of integrating AI into social security programs. AI is not going to magically solve underlying legal or societal obstacles in the social security domain. He points out that "*a social security system is about redistributing wealth and opportunities between different groups and AI on its own is not going to solve these issues, as they are often normative ones. These underlying issues by their nature will need to continue to be addressed in a traditional manner through comprehensive political and societal dialog*".

Zeiss further discusses current projects that employ direct architectural records to improve knowledge retrieval and generation using AI, demonstrating their practical applications in vast organisations. The project entails the task of modifying texts based on predetermined communication rules recorded in a database. This enables users to input text and obtain revised versions that completely adhere to communication principles. It is important to note that Zeiss highlights that the ultimate choices on reimbursement are still made by human operators, ensuring that they are held responsible and have supervision.

Challenges encountered throughout AI implementation

Nevertheless, the application of AI also poses difficulties, specifically in hiring and maintaining proficient AI experts, says Di Nicola. Public administrations frequently have challenges in offering competitive pay and maintaining appeal in comparison to the private sector. He emphasises the importance of having robust internal capabilities and consistently updating AI systems, particularly due to the sensitive nature of social security data and the need to comply to legislation such as the AI Act. He said that "*the challenges are not technological but human. The software development cycle of AI systems is totally different than traditional ones. AI software is built differently. You need to always maintain it. You cannot leave it unmanaged, and you need to have people who are able to build it and to keep it in place and they are very hard to find.*"

Corra agrees with Di Nicola and then adds the importance of tackling legal obstacles and recognises that implementing AI necessitates a clear and explicit understanding of prioritised values and how they are balanced in the delivery of services. This level of transparency compels talks about issues that previously often remained implicit when services were provided by humans or through classical automation. Issues that now need to be made explicit in terms of decisions and preferred results when wanting to apply AI. The desire to use AI is thus also a very good conversation starter about what should be the driving values of public service delivery.

Potential actions taken by the EU

Corra suggests that the EU should establish fundamental principles for AI-driven social security architectures, such as ensuring human oversight, maintaining a balance between human judgment and AI capabilities, and embedding European values. Nevertheless, Corra believes that the EU should not dictate all implementation technical details. He emphasises the significance of promoting discussion and ensuring that AI applications in public services are in line with European values in order to facilitate the efficient and ethical integration of AI. Although the EU has little authority in social protection, Corra underlines the EU's important role in facilitating these debates and ensuring that Member States follow ethical principles.

Di Nicola recognises the same difficulties experienced by social security administrations in EU countries, highlighting the possibility for the EU to establish a cohesive structure to tackle these

concerns. He proposes that the European Union may gather exemplary methods from different Member States in order to simplify solutions, thereby eliminating the necessity for each country to develop their own methods from scratch. Di Nicola argues for the European Union to provide assistance to European enterprises in the fields of AI and technology, emphasising the overwhelming influence of tech giants from the United States and China. He suggests that the European Union should support the expansion of these enterprises by granting them access to resources, promoting collaborations, and exchanging non-confidential information, in order to prevent excessive dependence on non-European technology corporations.

Panel 2: the European Union's role in ensuring a rightful use application of AI solutions in Social Security

Speakers discuss the Council recommendation on access to social protection, noting gaps in access and the potential of digital tools, including AI, to improve delivery and accessibility of social protection schemes. They emphasise the importance of digital solutions to enhance understanding and participation in social protection among citizens. The European Commission was urged to explore various digital tools and AI use cases for social protection, improve transparency, and focus on increasing citizen participation. The Council recommendation specifically aims to close gaps in access for non-standard workers and the self-employed and it also includes specific provisions for enhancing transparency, though this dimension has often been overlooked in the implementation reports of the Member States.

Dana-Carmen Bachmann, the Head of Unit, Social Protection, DG Employment, Social Affairs & Inclusion, European Commission), says that *"There was a very clear political priority from the current commission to support the digital transition, leading to work in the framework of digital decade program which has objectives and targets around four areas including digitisation in public services"*. The need to further connect ongoing initiatives linked to digitalisation and social policy initiatives has been emphasised as well as the need to ensure data safety and privacy when deploying algorithms in social services. The Commission will launch dedicated study on digitalisation in long-term care.

A non-legally binding initiative, the Council Recommendation on access to social protection for workers and the self-employed, is based on commitments by Member States to close gaps in access to social protection, particularly for people in non-standard forms of employment and the self-employed, ensuring adequacy and transparency. A study on transparency revealed many actions deployed at national level linked to digital solutions, including AI, and around 12 member states have integrated digitisation into their reforms and investments under the Recovery and Resilience Plans.

Transparency and trust in social protection systems has also been highlighted, together with efficiency through digital solutions, and the potential of predictive AI, while noting associated risks. The EU's role in providing technical support and encouraging dialogue among actors was emphasised by Dana-Carmen Bachmann, including initiatives such as the Public Sector Tech Watch's, an observatory dedicated to monitoring, analysing and disseminating the use of emerging technologies (e.g., Blockchain, Artificial Intelligence, etc.) within the public sector in Europe. Investment in digital technologies and collaboration with organisations like Eurofound and OECD were encouraged.

Nina Nissilä, ESIP Board of Governors & Director of Social Insurance Institution (Finland) emphasises the need for purposeful and context-specific applications of AI in social security. Her organisation notes that AI is not a one-size-fits-all solution, particularly in social security, where complex regulations make it difficult to find suitable AI applications. To address this, she stresses the importance of consistency across EU member states in AI implementation, recognising that varying levels of development and resources across institutions could benefit from a unified approach. She advocates for the creation of collaborative platforms to pool resources and avoid redundancy.

She also mentions the challenges and potential of AI in social protection. She points out that, in the Nordic countries, the relatively small data sets could lead to bias, suggesting the use of anonymized data from multiple sources to create larger, more reliable datasets. The European Blockchain Services Infrastructure was highlighted as a promising platform for future collaboration and automation. The implementation of the European Electronic Social Security Information (EESSI) system was cited as an example of successful data flow automation, reducing reliance on traditional methods. She shares a compelling analysis from her national organisation Kela, Finland's social insurance institution, showing that using AI to support 5000 NEET (Not in Education, Employment, or Training) young people could yield an economic benefit of €6 billion for Finland, alongside significant personal benefits.

Dorothy Adams, a Secondee from the New Zealand government to the OECD highlights the potential of digital tools and AI to enhance social protection delivery and participation. First, she notes challenges in providing social protection benefits due to complex rules and application processes. AI is in early stages, primarily used for chatbots, virtual assistants, and fraud detection, with future uses expected to include automating routine tasks and predictive analytics. Nevertheless, she emphasises the potential for automatic enrolment and the importance of international collaboration to share best practices.

Adams stresses the potential of AI and other technologies as well. She says: "*We see that, despite the limited deployment of advanced technologies, there are some countries which are really moving forward in terms of large, comprehensive change programs to revolutionize their public services through modernizing their technology platforms, changing their operating models and making the necessary cultural shifts"* supporting effective risk management, innovative leadership and public involvement in data-driven initiatives. She shares an example from New Zealand illustrating the benefits of public engagement in data use for social services, highlighting the necessity of a balanced approach to technology adoption in social protection.

All speakers stress though the importance of digital skills, safety, data privacy, and interoperability. Digitisation supports coordination between member states, with examples like AI matching beneficiaries with labour market opportunities. Projects are also exploring digitalisation in long-term care, and recent agreements on platform work include provisions for algorithm management with human oversight and transparency.

Yannis Natsis' closing remarks

The closing remarks of the webinar on AI and social protection from **Yannis Natsis**, the Director of ESIP, underscored several key points. Firstly, the session provided a grounded perspective, featuring

testimonies from ESIP members and social security experts that reflected both optimism and confidence in the current use of AI within social security institutions. It was emphasized that social protection has unique characteristics that necessitate specific attention, particularly in ensuring consistency and clarity in initiatives.

The necessity of continuous support, fostering dialogue, and exchanging best practices among stakeholders, especially social security institutions, was stressed. This collaboration is crucial for pooling expertise and resources. The importance of enabling the implementation of the AI Act, with its 24-month timeline for execution, was highlighted, and it was noted that legislative initiatives affecting social protection and employment are expected in the next mandate.

There is a strong desire for collaboration between national and EU levels, listening to experts who design and implement digital solutions, and translating theoretical EU policy discussions into practical national experiences. Ensuring and maintaining trust in social security systems is paramount, with transparency and accountability being essential components.

The webinar marked the beginning of ongoing initiatives within ESIP, emphasizing the need for continuous learning, exchanging experiences, and effective liaison with EU policymakers to ensure practical and beneficial legislative initiatives. Overall, the remarks underscored the importance of collaboration, transparency, and careful implementation of AI and digital solutions in social protection, highlighting the balance between potential and uncharted territory.