INTERNET GOVERNANCE FORUM IGF POLAND 2025

Final Report

IGF POLSKA

Warsaw, December 2025

Contents

Organisation

Internet Governance Forum – IGF Poland 2025

The Internet Governance Forum – IGF Poland 2025 was the latest edition of the recurring national conference, organised as part of the UN initiative. The IGF functions as an international space for dialogue, aiming to support an open and inclusive model of Internet governance and the entire digital space.

The event gathered a broad range of stakeholders: representatives of state and local government administration, business, civil society, academia, and technical experts. The participants had the opportunity to analyse the challenges regarding Internet development, digital security, and the use of new technologies.

In the global dimension, the IGF plays a significant role as a bottom-up forum for the exchange of practices and experiences, helping to shape the directions of digital development worldwide.

At the national level, IGF Poland facilitates debate on regulations concerning Internet access, personal data protection, and the support of technological innovation. Through multi-stakeholder engagement, recommendations are formulated concerning the local realities of digital space governance.

IGF Poland is part of the UN IGF National and Regional Initiatives (NRIs) network, comprising over one hundred independent national and regional initiatives recognised by the IGF Secretariat.

The national IGF Poland forum supports the mandate of the global IGF by providing local input to intersessional work and promoting a multi-stakeholder approach.

The IGF Poland 2025 edition took place concurrently with the ongoing review of the World Summit on the Information Society (WSIS+20), which constituted a key moment for summarising two decades of global actions for digital development and formulating new directions for Internet governance for the coming years.

IGF Poland 2025 was organised by the Ministry of Digital Affairs in cooperation with the Research and Academic Computer Network (NASK) National Research Institute, and representatives of all stakeholder groups were involved in creating the programme, in accordance with IGF principles.

Programme Board

The IGF Poland Programme Board determines the thematic scope of the conference, monitors the call process, evaluates submissions, and qualifies sessions to be organised during the event.

The Board is headed by **Bartosz Dominiak**, Chairman of the IGF Poland Programme Board and Director General at the Ministry of Digital Affairs.

Members of the IGF Poland 2025 Programme Board

- **Michał Doligalski**, Director, Department of Innovation and Development, Ministry of Science and Higher Education
- **Przemysław Fabjanowski**, Director General, Łukasiewicz Centre
- **Dorota Głowacka PhD**, Advocacy and Litigation Specialist, “Panoptykon” Foundation
- **Krzysztof Izdebski**, Advocacy and Development Director, Stefan Batory Foundation, member of the OECD Innovative Citizen Participation Network
- **Krzysztof Matyjaszczyk**, Vice-President of the Association of Polish Cities, Mayor of the City of Częstochowa
- **Jowita Michalska**, Founder and CEO of Digital University, Singularity University Ambassador
- **Marta Mikliszańska**, Director of Public Policy, Allegro
- **Aleksandra Musielak PhD**, Director, Digital Market Department, Lewiatan Confederation
- **Radosław Nielek PhD (Eng.)**, Director, NASK National Research Institute
- **Michał Nowakowski PhD**, lawyer, expert in the implementation of artificial intelligence systems
- **Professor Aleksandra Przegalińska**, Vice-Rector for Innovation, Kozminski University
- **Professor Piotr Sankowski**, Director, IDEAS Research Institute
- **Marianna Sidoroff**, Director, Digital Economy Department, Ministry of Economic Development and Technology
- **Bianka Siwińska PhD**, President, “Perspektywy” Education Foundation
- **Anna Streżyńska**, Director, National Institute of Telecommunications – National Research Institute

Thematic Scope

This year's edition took place over two days. The first day of IGF Poland 2025 began with an official opening referencing the current digital situation in Poland, Europe, and the world. The opening speech addressed the development trends in the digital world. The panel discussions primarily covered technology policy in the context of current and future challenges, debated the needs of the Polish digital economy, and explored how artificial intelligence and IT tools are changing the labour market.

The second day of IGF Poland 2025 was based on four thematic tracks and sessions selected through an open call, ensuring that the programme reflected as fully as possible the real needs and challenges reported by the expert community.

The Smart City track focused on intelligent urban solutions, emphasising the importance of technology designed with residents in mind.

As part of the track on Poland and Europe in the world of technological competition, issues of digital sovereignty, competitiveness, and the region's position in the global innovation race were discussed.

The safe digital space track addressed user protection and countering online threats.

Meanwhile, the track on technologies of the present and the future allowed for an examination of developing tools, such as artificial intelligence and data systems, through the lens of their potential, risks, and impact on society.

Call for Session Proposals

Following the pattern of previous years, the conference organisers announced a call for the organisation of thematic sessions, resulting in 47 submissions. The call was completely open, and anyone could submit their own proposal. As part of a promotional campaign on social media, the Ministry of Digital Affairs encouraged civil society, academia, technical organisations, public administration, and the private sector to submit proposals.

Due to logistical constraints, only a limited number of substantive sessions could take place during the event, within the following thematic areas:

- Smart City: humans at the centre of intelligent solutions,
- Poland and Europe in the world of technological competition,
- Safe digital space,
- Technologies of the present and the future.

On 10 October 2025, a meeting of the Programme Board of IGF Poland 2025 took place. During the meeting, the members of the Board evaluated all submissions sent as part of the open call and selected the session proposals to be organised during this year's edition of the conference.

Due to organisational limitations, only 20 substantive sessions originating from the call were presented during the event.

The Programme Board and the conference organisers thanked all individuals and institutions that submitted their proposals and congratulated the organisers of the sessions that were included in the Forum's agenda.

Agenda

Hotel InterContinental ul. Emilii Plater 49 00-125 WARSAW PROGRAMME				
Monday, 24 November 2025				
1:00 p.m. - 2:00 p.m.	**REGISTRATION AND WELCOME COFFEE MEETING** **(foyer, 2nd floor)**			
2:00 p.m. - 2:15 p.m.	**OPENING SPEECH** **Krzysztof Gawkowski**, Deputy Prime Minister, Minister of Digital Affairs **(plenary room) - YT streaming**			
2:15 p.m. - 2:45 p.m.	**KEYNOTE SPEECH** **Where is the digital world heading?** **Edwin Bendyk**, President of the Management Board, Stefan Batory Foundation **(plenary room) - YT streaming**			
2:45 p.m. - 3:45 p.m.	**PANEL DISCUSSION** **Technology policy today and tomorrow** moderation: **Sylwia Czubkowska**, Journalist, Techstorie **(plenary room) - YT streaming**			
3:45 p.m. - 4:00 p.m.	**COFFEE BREAK** **(foyer, 2nd floor)**			
4:00 p.m. - 5:00 p.m.	**PANEL DISCUSSION** **What does the Polish digital economy need?** moderation: **Karol Tokarczyk**, Economic Analyst, Polityka Insight **(plenary room) - YT streaming**			
5:00 p.m. - 5:10 p.m.	**TECHNICAL BREAK**			
5:10 p.m. - 5:55 p.m.	**PANEL DISCUSSION** **Programming without programmers? How the IT market is changing.** moderation: **Aleksandra Musielak PhD**, Lewiatan Confederation **(plenary room) - YT streaming**			
5:55 p.m. - 7:00 p.m.	**COCKTAIL RECEPTION** **(foyer, 2nd floor)**			
Tuesday, 25 November 2025				
9:00 a.m. - 10:00 a.m.	**REGISTRATION AND WELCOME COFFEE MEETING** **(foyer, 2nd floor)**			
	TRACK: **Smart City: humans at the centre of smart solutions** **(La Boheme room, 2nd floor)** **YT streaming**	**TRACK:** **Poland and Europe in the world of technological competition** **(Carmen room, 2nd floor)** **YT streaming**	**TRACK:** **Safe digital space** **(Don Giovanni room, 2nd floor)** **YT streaming**	**TRACK:** **Technologies of the present and the future** **(Symfonia room, 3rd floor)** **YT streaming**
10:00 a.m. - 11.00 a.m.	**Local Data Science: good practices in the analysis and use of urban data** **((Institute of Urban and Regional Development)**	**AI as a judge? AI as a legislator? How to ensure public trust in state institutions supported by AI.** **(University of Warsaw)**	**Why should we care about disinformation in Africa?** **(Pravda Association)**	**The financing model of the Baltic AI Gigafactory: what is the right combination of private and public capital?** **(National Institute of Telecommunications)**
11:00 a.m. - 11:15 a.m.	**COFFEE BREAK** **(foyer, 2nd and 3rd floors)**			
11:15 a.m. - 12:15 p.m.	**Smart City begins with data - digital infrastructure in practice** **("Transport and Logistics Poland" Employers' Association)**	**How to regain control over the infosphere?** **(DEMAGOG ASSOCIATION)**	**From the first click to digital strength! How to raise resilient children online** **(NASK National Research Institute)**	**Artificial intelligence as a tool supporting the creation of coherent and effective law** **("Lewiatan" Confederation)**
12:15 p.m. - 1:15 p.m.	**LUNCH** **(foyer, 2nd floor)**			
1:15 p.m. - 2:15 p.m.	**Resilient and secure Smart Cities - cooperation between government, local authorities, and business in developing digital infrastructure** **(Union of Polish Towns)**	**Digital sovereignty - Poland on the map of technological interdependence of Europe and the world** **(THINKTANK Leaders Hub Centre)**	**The Internet as a tool of disinformation during hybrid warfare** **(Ignacy Mościcki University of Applied Sciences in Ciechanów Centre for Innovation and Technology Transfer)**	**AI, LLMs, and AI Agents: an innovation accelerator or a digital Pandora's Box? The architecture of secure implementations.** **(WSB University)**
2:15 p.m. - 2:30 p.m.	**COFFEE BREAK** **(foyer, 2nd and 3rd floors)**			
2:30 p.m. - 3:30 p.m.	**Mobility 2030: from data to decisions - how to build a Polish MaaS for the benefit of residents** **(Jakdojadę)**	**Harmonising the legal and competitive framework for Polish e-commerce.** **(Chamber of the Digital Economy)**	**Influencers and creators - are they fighting disinformation or spreading it?** **(Magdalena Górnicka-Partyka)**	**Between analysis and prediction - how algorithms are changing social policy** **("Panoptykon" Foundation)**
3:30 p.m. - 3:45 p.m.	**COFFEE BREAK** **(foyer, 2nd and 3rd floors)**			
3:45 p.m. - 4:45 p.m.	**Safe food in a smart city. From data to decisions.** **(Green REV Institute)**	**Can Poland and Europe be significant players in the AI race?** **(AI Chamber)**	**Children online: biometrics, AI, and the limits of protection** **(Warsaw Enterprise Institute Foundation)**	**Quantum technologies - what is in it for Poland and business?** **(ZIPSEE "Digital Poland")**

Course of the event

The IGF Poland 2025 took place on **24 and 25 November 2025** in the conference facilities of the InterContinental Hotel **in Warsaw.**

The conference commenced with an opening speech delivered by Krzysztof Gawkowski, Deputy Prime Minister, Minister of Digital Affairs, and Government Plenipotentiary for Cybersecurity.

Photo: Ministry of Digital Affairs

Addressing the over 500 participants who had registered for the conference, Deputy Prime Minister Krzysztof Gawkowski stated the following in his opening speech:

"The Internet is undoubtedly the greatest human endeavour - a collective human endeavour - because it affects billions of people from various geographical areas on all continents, with everyone able to connect simultaneously, regardless of days and nights, hours, or seconds. It is also our shared responsibility to ensure that we do not become addicted to technology, but rather use it reasonably. We must ensure that quantum computers, artificial intelligence factories, and semiconductor production are harnessed for human development, rather than constituting a basis for the disempowerment of humanity. This is the space of the modern Internet that we should be discussing".

The opening speech addressed the significance of the Polish digital transformation and Poland's position within the global digital ecosystem. It emphasised that the pace of technological change confronts states with the necessity to define new priorities. It also indicated that the digitisation of administration and the economy should be a consistent

process aimed at building public value, rather than merely the implementation of individual solutions. It highlighted the role of cooperation among public institutions, the private sector, and social organisations, as well as the necessity of conducting policy based on data and accountability. The speech also conveyed a message regarding the need for courage in decision-making. It pointed out that the digital future does not simply occur on its own; it requires conscious shaping and bold, long-term thinking.

Following the opening address, a keynote speech was delivered by **Edwin Bendyk**, a journalist and commentator addressing civilisational issues and the impact of technology on social life, and President of the Management Board of the Stefan Batory Foundation.

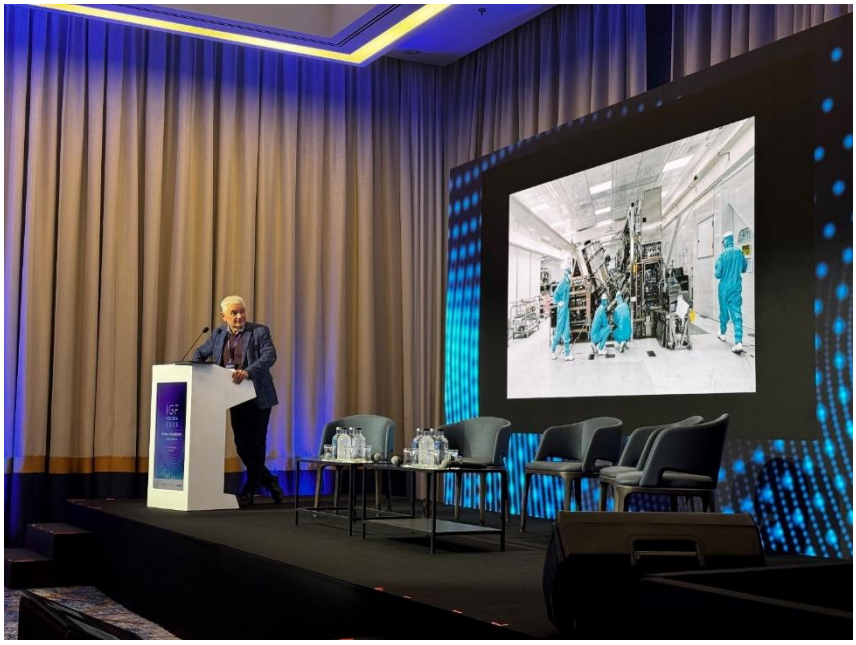

Photo: Ministry of Digital Affairs

The keynote address was an attempt to answer the question regarding the directions in which global digitisation is heading. The speaker emphasised that the digital world has ceased to be a separate domain; it has become the foundational infrastructure of societies and economies. He noted that the most significant changes concern the scale, complexity, and pace of technological development, which generate new opportunities, as well as risks. A need arises to redefine the role of states, as traditional regulatory tools are failing to keep pace with the operational logic of digital platforms. The significance of trust as the currency of the future was highlighted. The speech resonated with the message that the digital future is a future of interdependence: states must cooperate across borders while simultaneously safeguarding their own interests and resilience. The speaker pointed to the growing importance of artificial intelligence, automation, and data, which are becoming a primary economic resource. The key conclusion is that the digital world is heading towards an even greater integration of technology with everyday life, and states must respond to this with new competencies, new organisational structures, and a more responsive and responsible digital policy.

Following the conclusion of the keynote speech, the remainder of the first day of the conference was filled with three panel discussions organised by the Ministry of Digital Affairs.

On the second day of the conference, 20 thematic sessions selected from the call for proposals and divided into four thematic tracks took place.

The IGF Poland 2025 was conducted entirely in Polish.

As is the case every year, the conference adopted an open, multi-stakeholder format. During the sessions, with the active participation of the audience, panellists discussed new proposals and solutions regarding responsible policy for the development of the Internet, new technologies, and the entire digital space.

Throughout the event, an exhibition zone was in operation, comprising eight information stands prepared and staffed by various institutions, including the Ministry of Digital Affairs and the NASK National Research Institute.

The over 500 registered conference participants included representatives of public administration – both central and local – as well as businesses, civil society and non-governmental organisations, the academic and technical communities, and youth.

All sessions of the Forum were broadcast live on the Ministry of Digital Affairs' YouTube channel. Links to the conference recordings are provided at the end of this report.

Photo: Ministry of Digital Affairs

PANEL DISCUSSION: Technology policy today and tomorrow.

Photo: Ministry of Digital Affairs

Organiser
Ministry of Digital Affairs

Moderation

- **Sylwia Czubkowska**, Journalist, Techstorie

Panellists

- prof. dr hab. **Marta Postuła**, Vice-President of the Management Board, Bank Gospodarstwa Krajowego
- prof. **Tomasz Michalak**, IDEAS Research Institute
- **Krzysztof Izdebski**, Advocacy and Development Director, Stefan Batory Foundation
- **Jakub Jakóbowski**, Deputy Director, Centre for Eastern Studies

The panel focused on the desired shape of technology policy and the challenges that arise in its formulation. The discussion indicated that digital policy is no longer a matter of implementing individual services, but rather of designing entire ecosystems that must be interoperable, secure, and user-centric. The panellists noted that public institutions must transition from thinking in terms of traditional procedures to thinking in terms of processes and user experiences. It was emphasised that simplification and transparency are key. Overly complex regulations create barriers rather than removing them. Data serves as the fuel for modern administration, yet its use requires trust, standards, and appropriate safeguards.

The discussion also touched upon the necessity of building stable legal frameworks to foster innovation, as well as the role of the state as a partner and moderator, rather than solely a regulator. Furthermore, the need was highlighted to create a technology policy capable of coexisting with rapid technological development – one that is flexible, comprehensible, and founded upon dialogue with citizens and businesses.

PANEL DISCUSSION: What does the Polish digital economy need?

Photo: Ministry of Digital Affairs

Organiser
Ministry of Digital Affairs

Moderation

- **Karol Tokarczyk**, Economic Analyst, Polityka Insight

Panellists

- **Jurand Drop**, Undersecretary of State, Ministry of Finance
- **Ignacy Święcicki**, Head of the Digital Economy Team, Polish Economic Institute
- **Monika Borowiecka**, Managing Partner VC, Top 100 Women in VC in CEE
- **Rafał Kowalczyk**, Public Affairs Officer, CloudFerro S.A., Polish Cloud Association

This session discussed the key factors driving the development of the Polish digital economy. The panellists emphasised that the foundation of this development is the stability of the regulatory environment and the predictability of public policy.

It was pointed out that Polish technology companies possess significant potential, yet they frequently lack access to scalable public procurement, which could serve as a springboard for exporting innovation. One important element of the discussion was the role of infrastructure, reliable cloud services, networks, data centres, and interoperable platforms that enable business development. Much attention was also devoted to digital competencies, both among employees and within public administration, because without them, even the best technologies will remain unutilised. The panellists indicated that the digital economy requires cooperation between the administration and the private sector, as well as more flexible regulatory models that allow for experimentation and the faster implementation of innovations. The session concluded that the development of the digital economy depends on a combination of appropriate infrastructure, competencies, stable regulations, and the state's openness to partnering with business.

PANEL DISCUSSION: Programming without programmers? How the IT market is changing.

Photo: Ministry of Digital Affairs

Organiser
Ministry of Digital Affairs

Moderation

- dr **Aleksandra Musielak**, Director, Digital Market Department, “Lewiatan” Confederation

Panellists

- **Oskar Barcz**, Vice-President of the Management Board, “Generacja Innowacja” Foundation, Head of Engineering at the aforementioned Foundation, Senior Software Engineer at Atolls
- **Michał Nowakowski**, Member of the IGF Poland Programme Board, lawyer, expert in AI system implementation
- dr **Katarzyna Dębkowska**, Senior Manager, Research Process Coordinator, Polish Economic Institute
- **Marianna Sidoroff**, Member of the IGF Poland Programme Board, Director, Digital Economy Department, Ministry of Economic Development and Technology

The panel was dedicated to evaluating the impact of machine learning-based solutions, which generate code to a degree comparable to a human programmer, on the Polish labour market, the shaping of the competencies of IT students and graduates specialising in software, and their future career paths. During the discussion, the experts addressed the influence of the development of AI-based solutions, including low-code and no-code platforms, on the functioning of the IT market in Poland. The panellists acknowledged that the development of new technologies affects the employment prospects of young programmers, though this impact is not drastic. Automated solutions are imperfect and lack personalisation. The IT sector is a dynamically developing industry that relies on highly qualified specialists. According to experts, IT management lacks ideas on how to make the most of junior developers, who are quick learners and have the energy to get involved in new projects. The panellists emphasised that in today's world, young IT professionals must possess not only technical skills but also knowledge regarding the business model in which their company operates, as well as the ability to think critically. Language models are not creative, a fact frequently forgotten by the companies that use them. Their application in business leads to the creation of an “artificial” confidence, resulting in companies less frequently verifying machine-generated code until it causes serious damage. Risk aversion is one of the primary reasons for the difficulties in hiring young IT professionals in IT companies. For management personnel, errors committed by AI are more acceptable than errors committed by a human. At a certain stage of a company's growth, it is necessary to account for higher risk, specifically the risk generated by the human factor.

TRACK: Smart City: humans at the centre of smart solutions.

Local Data Science – good practices in the analysis and use of urban data.

Photo: Institute of Urban and Regional Development

Organiser
Institute of Urban and Regional Development

Moderation

- **Wojciech Łachowski**, Institute of Urban and Regional Development

Panellists

- **Adam Rodziewicz**, Deputy Director, Geodesy Department, Gdańsk City Hall
- **Justyna Przeworska**, Head of the Spatial Analysis Team, Gdańsk Development Office
- **Tomasz Ratajczak**, Director, Development Planning Department, Jarocin Municipal Office
- **Anna Dwurnik**, Director, Development Department, Kielce City Hall

The session demonstrated that “local data science” involves combining data with urban knowledge and embedding analyses into decision-making processes Value is generated not by individual tools, but by repeatable processes, competencies, and a culture of working with data: from the quality of source data, through methodology, to the communication of results.

Representatives of Kielce discussed the implementation of Business Intelligence as a tool for translating data into management information. Crucial factors included the establishment of an analytical team and the development of interactive dashboards used within the municipal office and made available to residents on the “Zoom na Kielce” portal. The topics discussed included analyses of migration and the doughnut effect (indicators on a map, outflow directions), as well as the use of BI for strategy monitoring and reporting.

Representatives of Jarocin presented the Spatial Information System as a tool for daily management, particularly in the context of the planning reform (the general plan, infill development areas, the open zone). It was emphasised that data “do not analyse themselves”: rapid overlay analyses and alerts (e.g., detecting municipal real estate in the open zone, supporting the assessment of the impact of zoning and development decisions) only become meaningful when the municipal office translates them into planning and remedial actions.

Representatives of Gdańsk presented the monitoring of revitalisation based on the annual indicator analysis of the Municipal Revitalisation Programme. They indicated the need for cyclical data capable of spatial analysis (municipal aggregates do not illustrate differentiation), with the social sphere (including unemployment, education, demographic ageing) serving as the core of the diagnosis, supplemented by the economy, environment, spatial planning, and technical conditions, which allows for comparing areas and tracking changes over time.

Furthermore, Gdańsk presented GIS for urban resilience: scenario analyses supporting preparation for critical events and action planning (e.g., designating rubble zones, assessing passability and evacuation routes). It was noted that the credibility of these models depends on the quality and completeness of the data, as well as on the foundational work regarding their updating and consistency.

During the discussion, it was highlighted that the greatest risk to the development of analytics in local governments is the impermanence of competencies: know-how should remain within the municipal office, rather than exclusively with external contractors. The wage barrier (the outflow of trained personnel) and the potential of low-code and no-code tools were identified, provided that control over the data and methodology is maintained.

The key conclusions and recommendations were as follows:

1. Build and maintain permanent analytical teams (GIS/BI) alongside employment conditions that allow for the retention of specialists.
2. Organise source data and standards (dictionaries, metadata, versioning), and document methodologies in such a way that analyses are repeatable and auditable.
3. Combine BI with GIS: treat the map component as a standard wherever decisions are territorial (revitalisation, education, mobility, security).
4. Develop “internal” analytics for management in parallel with the public communication layer (portals and dashboards) that builds trust.

5. Require knowledge transfer in projects with suppliers, and build solutions in a way that allows the municipal office to maintain and develop them independently.

Smart City begins with data – digital infrastructure in practice.

Photo: "Transport and Logistics Poland" Employers' Association

Organiser
"Transport and Logistics Poland" Employers' Association

Moderation
- **dr Izabela Rudzka**, SGH Warsaw School of Economics

Panellists
- **Adrian Mazur**, Director, Transport Strategy Department, Ministry of Infrastructure
- **Maciej Wroński**, President, Transport and Logistics Poland
- **Katarzyna Kopytowska**, Deputy Director, Strategy and Product Management Division, Centre for Information Technology
- **Karolina Wiater**, Strategy & Operations Manager, Bolt
- dr inż. **Jarosław Bułka**, Plenipotentiary of the Mayor of the City of Kraków for Digital Transformation

The panel commenced with a question from the moderator: *"How can we ensure that the urban transport system best meets the expectations of residents and supports the smart city concept?"*

The representative of the Ministry of Infrastructure, Adrian Mazur, emphasised the importance of sound strategic planning. *"Everything begins with a good plan and a good strategy*", he stated, pointing to the Sustainable Urban Mobility Plan as a model document that assumes maximum social participation and the involvement of all stakeholders. He presented, among other things, an integrated traffic model created at the Centre for EU Transport Projects, as well as the planned National Access Point for Multimodal Traffic

and Travel Data, which aims to introduce the NetEx standard for timetables and a digital register of stops.

The issue of system interoperability emerged as one of the principal threads of the discussion. The President of "Transport and Logistics Poland", Maciej Wroński, pointed to issues stemming from a lack of standardisation, mentioning such things as the problems associated with an excessive number of applications for operating electric vehicle chargers. He emphasised that "*digitisation cannot be an end in itself"* and drew attention to the necessity of the industrialisation and standardisation of processes. Wroński also indicated problems regarding the flow of information between public administration systems, citing the example of the SENT system or the lack of data integration concerning permits for regular passenger lines.

Experiences derived from the operation of the state register system became another important point of discussion. Katarzyna Kopytowska from the Strategy and Product Management Division at the Centre for Information Technology presented experiences from the ten-year operation of the state register system. *"We truly encourage them, especially those entities that have not yet integrated with us, to do so as quickly as possible",* she said regarding the institutions.

The Chief Municipal IT Strategist of Kraków, Jarosław Bułka, presented the local government perspective, indicating that "*managing transport and building smart city projects is, paradoxically, not about technology; it is about organisation, projects, and interoperability".* He admitted that "*local government units are notorious for rolling over technological debt"* and experience difficulties in managing the data layer.

The Strategy & Operations Manager at Bolt, Karolina Wiater, emphasised the importance of cooperation with local authorities: *"We communicate with local authorities and see this significant openness regarding these changes in our discussions".* She drew attention to the problem of digital exclusion and educational initiatives, such as the Senioriada in Kraków, where the company taught users how to navigate the application. She emphasised that the common goal of all parties is to provide residents with a choice of modes of transport and to deliver transparent services that will complement their daily lives. Wiater also pointed to practical administrative problems: *"One has to go to many different offices to present the same set of documents"* when obtaining taxi licences, even though the data is already present in various registers.

Conclusions from the discussion:

- Interoperability and standardisation are the greatest challenges; the lack of standards for data exchange between different systems paralyses smart city development.
- Transport planning must extend beyond administrative borders: there is a necessity to think in terms of agglomerations, and not solely the urban municipality.
- Legislation frequently hinders the implementation of digital solutions – the law fails to keep pace with technological capabilities.
- Digital exclusion requires continuous attention; solutions must be intuitive for all age groups, not only for those who are technologically proficient.

- Cross-sectoral cooperation is essential: the public, private, and academic sectors must collaborate for the effective digital transformation of cities.

Resilient and secure Smart Cities – cooperation between government, local authorities, and business in developing digital infrastructure.

Photo: Ministry of Digital Affairs

Organiser
Union of Polish Towns

Moderation

- **Bartosz Dominiak**, Director General, Ministry of Digital Affairs

Panellists

- **Grzegorz Cichy**, President, Union of Polish Towns
- **Maciej Kaczmarek**, Director, Mobile Network Development Support Department, Play
- **Grzegorz Foltak**, Member of the Management Board, Cities on the Internet Association
- **Grzegorz Czwordon**, Deputy Director, Telecommunications Department, Ministry of Digital Affairs

The session aimed to exchange experiences and identify key challenges associated with the construction of resilient and secure Smart Cities, with particular emphasis on the role of digital infrastructure and cooperation among government administration, local governments, and the private sector.

The introduction to the discussion emphasised that the Smart City concept should not be limited exclusively to the implementation of modern technologies, but must focus on the

real needs of residents, data security, infrastructure resilience, and equality of access to digital services. It was pointed out that smaller cities and municipalities represent a particular challenge, as they frequently struggle with limited financial resources, competency shortages, and underdeveloped telecommunications infrastructure.

A significant thread of the session was cybersecurity in local government units, including the protection of critical infrastructure, such as water supply, energy, or transport systems. The panellists pointed to the growing number of cyberattacks and the need for a systemic approach encompassing resource inventory, network segmentation, the preparation of crisis scenarios, and the continuous enhancement of the competencies of administrative staff.

The discussion also emphasised the importance of developing broadband and mobile networks as the foundation of the Smart City. Representatives of the government administration highlighted the role of state support programmes and the necessity for coherent regulatory actions.

From the perspective of local governments, the need for partner cooperation with telecommunications operators was accentuated in order to effectively counteract digital exclusion and ensure equal access to digital services for residents.

The session concluded with the formulation of key conclusions and recommendations:

1. The development of Smart Cities in Poland requires the integrated cooperation of central administration, local governments, and business, based on a long-term strategy.
2. Digital infrastructure and cybersecurity should be treated as elements of critical infrastructure, especially in smaller towns.
3. It is essential to strengthen digital competencies in local government units and to ensure stable financing mechanisms and regulatory support for investments in connectivity.

The panel participants unanimously emphasised that resilient and secure Smart Cities are a prerequisite for sustainable development and the building of residents' trust in digital services and public institutions.

Mobility 2030: from data to decisions – how to build a Polish MaaS for the benefit of residents

Photo: Ministry of Digital Affairs

Organiser
Jakdojade

Moderation

- **Agnieszka Zaręba**, Journalist, Forbes Poland

Panellists

- dr inż. **Jarosław Bułka**, Plenipotentiary of the Mayor of the City of Kraków for Digital Transformation
- **Szymon Ciupa**, smart city expert, author of the smartcity-expert.eu blog
- **Bartosz Burek**, President, Jakdojade
- **Michał Konowrocki**, General Manager, Uber Poland

The panel concerned the challenges and prospects of building an integrated, data-driven mobility ecosystem in Poland, as well as the cooperation between the public and private sectors.

The panel commenced with a brief “yes/no” test, which revealed discrepancies among the panellists, e.g. regarding the assessment of cities' capabilities to utilise data, their readiness to work with businesses, and the feasibility of building a unified MaaS system by 2030.

The most significant challenges identified by the participants were as follows:

1. Legislative barriers and a lack of standards, which hinder interoperability and data exchange;

2. The inherited technological debt of local governments, which causes integration difficulties;
3. The fragmentation of systems and tariffs, which blocks the creation of unified services for residents;
4. The panellists unanimously emphasised that without state legal frameworks, the standardisation process would not occur;

It was indicated during the discussion that Kraków, serving as an example of a digitally advanced city, utilises a broad set of data: from public registers and geodetic data, to IoT, camera imagery analysed by AI, and data from carriers and private platforms. Simultaneously, all cities struggle with data quality barriers and legal limitations regarding their integration.

The experts pointed out that Polish cities are gradually learning to make decisions within a data-driven model, although the level of competency remains uneven. The development of interdisciplinary analytical teams is of great importance. The significant role of opening data was also emphasised – without it, no innovations are created.

From a business standpoint (Jakdojade, Uber), the key factors include the simplification of rules, the unification of tariffs, and the creation of a uniform, simple ticket capable of integration with private services. Global platforms can contribute technological experience and ready-made user interfaces; however, they will not replace strictly urban functions. Public-private cooperation is essential, but it requires stable frameworks and data openness.

Conclusions and key takeaways:

- MaaS in Poland is feasible, but it requires a strong regulatory impulse and supra-local standardisation.
- The greatest limitation is not technology, but rather competencies, structures, and processes in public administration.
- Opening data and its consistent utilisation should become the norm, rather than the exception.
- Mobility should be built around the needs of residents – technology is merely a tool.

Recommendations of the panellists:

- creating a unified, simple, nationwide ticket as the first step towards MaaS,
- introducing national data and interoperability standards,
- increasing investments in analytical competencies within local governments,
- developing partnerships with private platforms while maintaining open data and transparent rules.

The panel concluded with the reflection that the key elements in mobility transformation are not applications or tools, but rather people and their readiness for cooperation, change, and making data-driven decisions.

Safe food in a smart city. From data to decisions.

Photo: Ministry of Digital Affairs

Organiser

Green REV Institute

Moderation

- **Morgan Janowicz**, Member of the Management Board, Green REV Institute, Vice-President, “Bezpieczna Żywność” Federation

Panellists

- dr hab. inż. **Tadeusz Pomianek**, originator, founder, and long-standing Rector of the University of Information Technology and Management in Rzeszów, currently President of the University; Doctor Habilitatus of Technical Sciences (AGH University of Kraków)
- dr **Robert Maślak**, Wrocław City Councillor, Assistant Professor at the Faculty of Biological Sciences, University of Wrocław, Member of the Expert Council, Green REV Institute
- dr hab. **Katarzyna Jasikowska**, professor at the Jagiellonian University, Ambassador of the European Climate Pact, Coordinator of the JU Climate Council
- dr **Marzena Cypryańska-Nezlek**, Head of the Centre for Climate Action and Social Transformations at SWPS University, Co-Chair of the Scientific Council, “Bezpieczna Żywność” Federation
- **Rafał Czech**, Co-Creator of the “Bezmięsny” brand and Co-Founder of the Polish Association of Plant-Based Food Producers

In a smart city, technology supports trust and shared responsibility, enabling the tracking of food origin and its impact on health and the environment. Food security in 21st-century cities is as strategic as transport or energy. The process involves local governments, local producers, scientists, public institutions, and residents, all of whom co-create food policies.

The panel discussed how to build trust among data, decisions, and people, utilising technologies to create smart, equitable, and responsible cities.

Food strategy and new technologies

The panel began with a review of the situation in Poland – the lack of a Safe Food Strategy and the marginalisation of the topic in public policies. Mr Pomianek highlighted the use of AI in agricultural analyses and the prediction of food production trends. Mr Maślak emphasised the importance of integrating urban data (prices, availability, food waste, environmental footprint, residents' health) for a sustainable food policy. Prof. Jasikowska highlighted the role of universities and the student community in nutritional education, as well as the need to develop a network of canteens serving local and plant-based food. Rafał Czech indicated the plant-based sector's readiness to work with local governments, along with its role in food security during crises and social changes. Ms. Cypryańska-Nezlek discussed the role of social psychology and behavioural sciences in engaging residents and building trust in AI-driven decisions.

Technologies and data management

The experts discussed the challenges of integrating data systems and applying AI to monitor food quality. Mr Pomianek emphasised the need for a coherent food safety monitoring system within municipal and national strategies. Ms. Jasikowska pointed to educational projects (InterHED) aimed at analysing the nutritional awareness of students. Rafał Czech discussed the potential of food-tech models in promoting sustainable food and the development of plant-based networks in schools. Ms. Cypryańska-Nezlek spoke about building trust in AI and its utilisation for the education of residents. Mr Maślak presented local initiatives that monitor food waste and the impact of actions on the carbon footprint.

Practical examples and recommendations

Rafał Czech: US experiences in supplying plant-based food to schools can inspire Polish local governments. Ms. Cypryańska-Nezlek: AI supports nutritional education and access to information. Mr Pomianek: cooperation between universities and local governments in food system innovations. Ms. Jasikowska: public procurement, canteens, and educational events support the food transformation by monitoring the impact on emissions and food waste. Mr Maślak: digital tools support the food sovereignty of cities, for example, through production planning in vertical farms.

Conclusions

1. Poland requires a comprehensive Safe Food Strategy.
2. The integration of urban and national data, as well as the use of AI, are crucial for monitoring food safety.
3. Cooperation among universities, local governments, and the private sector is essential for creating sustainable systems.
4. Social psychology and behavioural sciences support resident engagement.
5. The plant-based food industry is ready for cooperation and the implementation of innovations.

6. International practices, monitoring, and AI can support the development of local food systems.

TRACK: Poland and Europe in the world of technological competition

AI as a judge? AI as a legislator? How to ensure public trust in state institutions supported by AI.

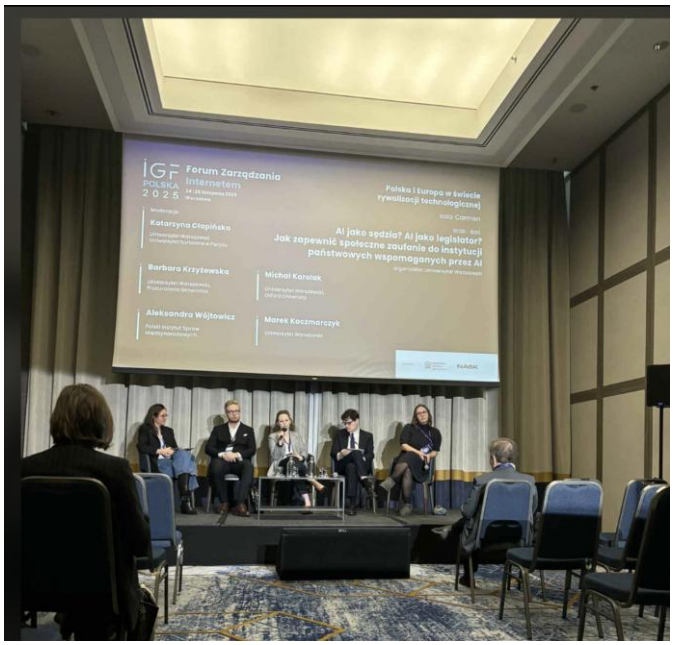

Photo: University of Warsaw

Organiser
University of Warsaw

Moderation

- **Katarzyna Cłapińska**, University of Warsaw, Sorbonne University in Paris

Panellists

- **Barbara Krzyżewska**, University of Warsaw, General Counsel Office to the Republic of Poland
- **Michał Karolak**, University of Warsaw, University of Oxford
- **Aleksandra Wójtowicz**, Polish Institute of International Affairs (PISM)
- **Marek Kaczmarczyk**, University of Warsaw

The panel was dedicated to analysing the role of artificial intelligence in the functioning of the modern state, with particular emphasis on public administration and the justice system.

The discussion, conducted from the perspective of public law, focused on the challenges associated with the automation of decision-making processes, the liability for the operation of AI systems, and the conditions necessary to maintain public trust in institutions utilising advanced technologies.

The panellists emphasised that the potential of AI in enhancing the efficiency of administrative procedures is significant; however, it must not lead to the weakening of procedural guarantees or the principle of transparency. They pointed out that administrative and judicial decisions are of an authoritative nature; therefore, replacing a human with an algorithm requires exceptional caution and a clear definition of the boundaries of automation.

The impact of automation on the labour market and the role of the state in mitigating the negative consequences of technological transformation were also discussed. Possible scenarios for introducing a universal basic income as a response to changes in the employment structure were debated, referencing experiences and discussions conducted in selected European countries.

The panel concluded with the unanimous agreement that AI technologies can support the state in fulfilling its functions, yet the prerequisite for their acceptance is respect for citizens' rights, ethics, and the principles of a democratic state governed by the rule of law.

How to regain control over the infosphere?

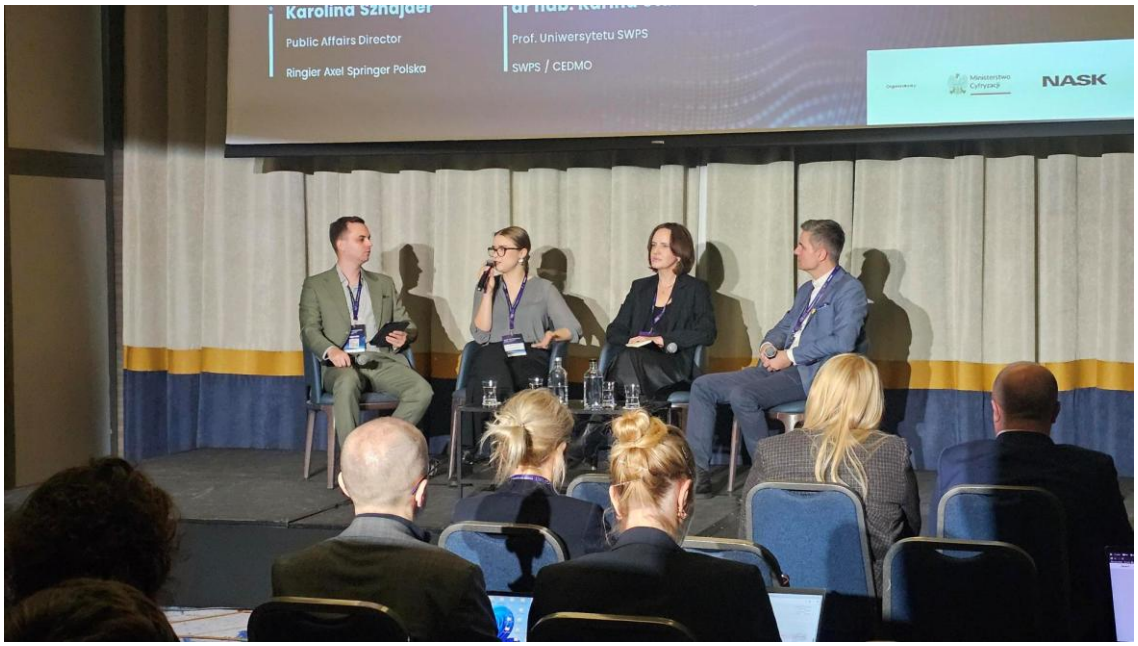

Photo: Ministry of Digital Affairs

Organiser
Demagog Association

Moderation

- **Marcel Kiełtyka**, Member of the Management Board, Demagog Association

Panellists

- **Aleksandra Wrona**, Vice-President, Pravda Association
- **Piotr Mieczkowski**, Managing Director, Digital Poland Foundation
- **Karolina Sznajder**, Public Affairs Director, Ringier Axel Springer Polska

The subject of the session was a discussion on how Europe (including Poland) can strengthen its information sovereignty and regain greater control over the flow of information amidst the dominance of American and Chinese digital platforms. The moderator emphasised that the key channels of social communication and content distribution remain in the hands of non-European entities, resulting in structural dependence, susceptibility to manipulation, and limited regulatory agency during crises.

In the first part of the discussion, Piotr Mieczkowski indicated that from Europe's perspective, a “both/and” approach is necessary: the parallel development of proprietary solutions and platforms, alongside the strengthening of enforceable rules for global platforms. He drew attention to the geopolitical dimension of platforms: when they are owned by non-EU entities, they become an element of trade negotiations and tensions, and their home states utilise them as instruments of influence. Simultaneously, the speaker emphasised that building European platforms is particularly challenging due to market mechanisms in which “technology loves monopoly”, and due to the lack of a single, strong capital market in Europe (unlike in the USA and China), which hinders economies of scale and the long-term subsidisation of development.

The thread of European alternatives to dominant platforms was expanded upon in the context of adoption conditions: success is determined not exclusively by product quality, but by “whether anyone is on this app” (the network effect). In this context, the potential role of the public sector and public procurement as a lever supporting European solutions was indicated (e.g., by favouring specific communication channels for public institutions), with the simultaneous caveat that without real incentives and funding, it is difficult to compete with platforms operating on a “free” model (financed by advertising and the monetisation of attention).

The second significant block of the discussion concerned automation, bots, and coordinated influence operations. Aleksandra Wrona pointed to the practical dimension of the problem, e.g. the regular, automated attempts to “clog” fact-checking organisations with a large volume of reports (Russia’s so-called overload operation). The panel also highlighted the pitfall of “reports” and “charts” based on poor methodology, which can achieve enormous reach and are subsequently replicated by the media and institutions as allegedly credible. In this context, the need for access to platform data was noted – without it, the risk of erroneous conclusions increases, and a reliable assessment of the scale of manipulation (including artificially generated traffic) remains hindered.

During the discussion, the thread of the platform business model based on the monetisation of attention and polarisation recurred several times. It was pointed out that platforms have limited motivation to effectively eliminate certain harmful phenomena (bots, online fraud, false advertising) if the costs of enforcing rules and the potential loss of

revenue outweigh the risk of sanctions. In this context, Aleksandra Wrona drew attention to the fact that even if platform terms of service exist, their enforcement is sometimes ineffective, and potential fines may be treated merely as a cost of doing business.

Karolina Sznajder outlined the perspective of publishers and the media, emphasising that users still seek "context" within professional media during crises; however, the media operate in a market with an uneven playing field. She drew attention to such things as: (1) the legal and regulatory limitations and liability of the media (press law), coupled with a simultaneous lack of analogous obligations on the part of platforms; (2) the dominance of platforms in the advertising market; (3) the use of journalistic content to build competitive models (including AI-based services), which weakens the financing of quality journalism. It was emphasised that the goal of the media is not to secure financing from the state budget, but rather to create market conditions that will enable fair competition and the protection of valuable content.

During the session, the issue of scams and deepfakes in advertisements was also mentioned, alongside the limited effectiveness of reporting systems. Examples were cited of content impersonating well-known figures and brands, which, despite being reported, can remain on platforms for extended periods. Attention was also drawn to the lack of clear mechanisms for reporting "advertising as a scam" within certain advertising ecosystems.

The final part of the session focused on the model of cooperation among the state, the media, NGOs, and the private sector. It was emphasised that actions are frequently fragmented and duplicated, and barriers often include a lack of stable funding, low levels of philanthropy, and the short-lived nature of coordination initiatives. Simultaneously, it was indicated that areas directly related to state security require the participation of public institutions, while upholding the principles of independence and the avoidance of politicisation.

Audience's remarks

During the discussion involving the audience, comments were made on such things as the distinction between the editorial responsibility of the media and the status of Internet intermediaries (in the context of the DSA and the conditional liability regime). In response, attention was drawn to the fact that, in practice, the boundaries between the "hosting" and "editing" of content are often blurred in a world where recommendation algorithms perform the function of selecting and amplifying the message. Statements by representatives of the publishing industry accentuated the need to update the liability paradigm, particularly concerning content generated and distributed by AI systems, as well as in the context of the advertising ecosystem, where scams are replicated on a massive scale.

Key conclusions and postulates

The session participants indicated the following specific directions for action (in synthetic terms):

1. A parallel EU approach: strengthening the enforcement of regulations (DSA/DMA and related instruments) and building conditions for the development of European digital solutions (including platforms and infrastructure).

2. Access to data and auditability: increasing real access to platform data for research and risk assessment (including bots, influence operations, and false advertising), and improving the transparency of recommendation mechanisms.
3. More effective mechanisms for reporting scams, deepfakes, and other harmful content: strengthening the obligations of platforms regarding their response to reports, including in the area of digital advertising and the impersonation of individuals or institutions.
4. Levelling the playing field in the information market: limiting the regulatory and economic asymmetry between the media and platforms (including in the area of advertising and the use of content for AI models), while maintaining the independence of the media.
5. Cross-sectoral coordination: building durable mechanisms for cooperation among the state, NGOs, the media, and the private sector, with a clear division of roles, the avoidance of duplicating actions, and the provision of stable sources of financing for independent entities operating in the state's interest and complementing its role.
6. Strengthening societal resilience: developing media and digital education, and supporting fact-checking and analytical initiatives that enhance society's ability to recognise manipulation.

The session confirmed that “regaining control over the infosphere” requires simultaneous regulatory, market, and social actions, as well as the consistent enforcement of rules against global platforms, while concurrently strengthening European information institutions and quality media.

Digital sovereignty – Poland on the map of technological interdependence of Europe and the world.

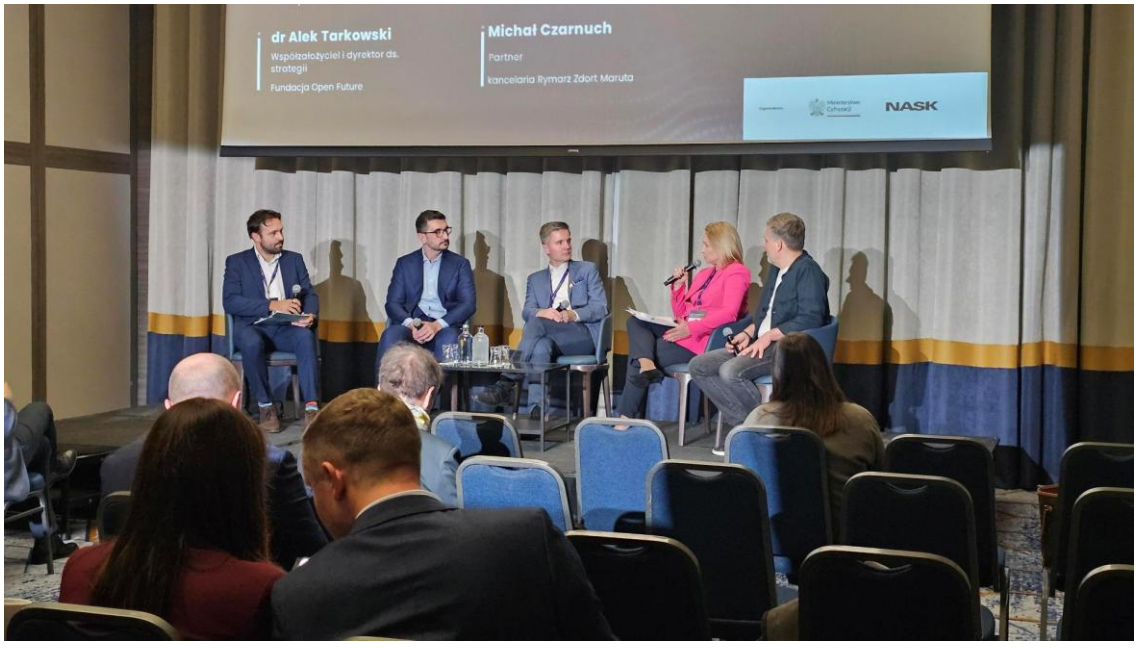

Photo: Ministry of Digital Affairs

Organiser
THINKTANK Leaders Hub Centre

Moderation

- **Michał Smagowicz**, Vice-President of the Management Board, THINKTANK Leaders Hub and Centre for International Relations Foundation

Panellists

- **Piotr Mieczkowski**, Member of the Management Board, Polish Chamber of Commerce for Electronics and Telecommunications
- dr **Alek Tarkowski**, Co-Founder and Strategy Director, Open Future Foundation
- **Magdalena Chudzikiewicz**, General Manager, home.pl
- **Michał Czarnuch**, Partner, Rymarz Zdort Maruta law firm

Severe geopolitical turbulence is forcing EU member states, including Poland, to intensify efforts towards strengthening the resilience and self-reliance of their economies, including the enhancement of digital sovereignty. However, this is not about the illusion of self-sufficiency, which is unrealistic in the context of modern globalisation, but about finding a balance that will allow Europe to protect its own interests, retain its agency and, at the same time, benefit from its network of international relations. The panellists discussed technological sovereignty, attempting to answer the question of how the European Union, and Poland alongside it, can strengthen its competencies, security, and independence in key technological areas.

Harmonising the legal and competitive framework for Polish e-commerce.

Photo: Ministry of Digital Affairs

Organiser
Chamber of the Digital Economy

Moderation

- **Witold Chomiczewski**, Plenipotentiary for Legislation at the Chamber of the Digital Economy, Attorney-at-Law, Managing Partner at Lubasz i Wspólnicy – Kancelaria Radców Prawnych sp.k.

Panellists

- **Monika Kosińska-Pyter**, President, Federacja Konsumentów
- **Ewelina Stępnik-Godawa**, Regulatory Affairs Manager, Allegro
- **Agnieszka Kisielewska**, Customs Coordinator, Chamber of the Digital Economy; Tax Advisor and Partner at Halcyon

The discussion concerned the challenges associated with ensuring equal legal and competitive frameworks for the Polish and EU e-commerce sectors. The participants focused on the importance of effectively shaping and enforcing legal provisions at both the national and EU levels as a condition for the functioning of the European Union's single market.

The discussion concerned the global nature of the digital economy, which, on the one hand, provides consumers with easy access to the offerings of sellers from around the world, and on the other, reveals numerous regulatory inequalities between entrepreneurs operating within the EU and entities from outside its area.

From the consumer perspective, it was noted that price remains one of the key factors in purchasing decisions. However, consumers are not always aware of the reasons behind the price differences between EU and non-EU offers or of the consequences of purchasing in markets with lower regulatory standards.

On the other hand, the negative impact of the inconsistent application of regulations on the competitiveness of companies operating under EU regulations was discussed from the perspective of businesses. It was indicated that the lack of effective enforcement of law weakens the position of entities that do comply with the regulations.

One vital element was also the customs and tax issues, e.g. eliminating the de minimis customs exemption threshold of up to EUR 150, handling fees, advertising restrictions, and the blocking of interfaces that violate the law. The role of public administration in the effective implementation and monitoring of regulations was also emphasised.

The session aimed to develop recommendations regarding actions that Poland should undertake in cooperation with European Union institutions to strengthen the competitiveness of domestic entrepreneurs and ensure fair operating conditions within the common market.

Conclusions

- EU regulations should be effectively enforced against all market participants, including non-EU entities.
- Failure to enforce the law undermines the competitiveness of companies that do comply with the regulations.
- Unequal legal frameworks in global e-commerce increase risks for consumers and negatively impact fair competition.
- The elimination of the de minimis customs threshold is a significant step in levelling competitive conditions.
- The effectiveness of supervision depends on the appropriate financial and organisational resources of the authorities.

Recommendations

- Strengthening law enforcement against non-EU entities.
- Ensuring adequate financing and competencies for supervisory authorities.
- Continuing work on abolishing the customs duty exemption threshold and introducing mechanisms that level competition.
- Increasing transparency for consumers regarding the consequences of purchasing outside the EU.
- Strengthening Poland's cooperation with EU institutions in the area of creating, implementing, and monitoring e-commerce regulations.

Can Poland and Europe be significant players in the AI race?

Photo: Ministry of Digital Affairs

Organiser
AI Chamber

Moderation

- **Marcin Olender**, Director of Public Policy, AI Chamber

Panellists

- **Maria Dymitruk**, Attorney-at-Law, Counsel, Head of the Artificial Intelligence Practice at Lubasz & Wspólnicy law firm
- **Emilian Suchecki**, CTO, SiDLY
- **Wiktoria Wójcik**, Co-Founder and CMO, inStreamly

There is currently a consensus that AI is a breakthrough technology, the mastery and implementation of which will largely determine the position of states in the global economic and geopolitical order in the coming decades. Individual states are adopting and implementing strategies to support the development of their domestic AI sectors and broader adoption across the entire economy.

In this context, the discussion focused on a key question: do Poland and Europe still have a chance to catch up with the leaders of the AI race, why do we not have global leaders among our enterprises, and can we remove these barriers (legal, social, economic, cultural) and engage in the fight with the most advanced players for primacy in AI, or would a different strategy (ecological niches, imitation), which we could adopt while still maintaining our position and a well-functioning economy, be more beneficial?

Legal aspects: Discrepancies in the assessment of regulations

The introduction of the AI Act and related legislation has met with a mixed reception. On the one hand, a uniform, pan-European compliance standard is seen as a potential competitive advantage – implementing high standards across the EU could facilitate global expansion (a "one-off implementation" rather than multiple local ones). On the other hand, the fragmentation of the European market, the risk of legislative unpredictability (changes in regulations during implementation processes), and high adaptation costs constitute a massive burden, especially for SMEs. Regulatory sandboxes supporting the safe testing of AI offer hope; however, their effectiveness depends on the competencies of supervisory authorities, which generates the risk of competition between jurisdictions within the EU. The concept of a "28th regime", which could facilitate cross-border activity, is indicated as a remedy for barriers to entry.

The perspective of startups (software & AI)

For startups, the key challenge remains access to capital at the scale-up stage and infrastructural barriers, in particular, the lack of local computing power (GPUs) and dependence on global cloud giants. The complex regulations (GDPR, privacy) and investor requirements frequently force companies to incorporate in the USA. Despite access to outstanding technical talent (engineers, scientists), the market suffers from a deficit of product managers capable of combining technology with business goals. AI adaptation is frequently a "bottom-up" process, carried out through the integration of existing models, and initiatives such as the Polish "Bielik" model are evaluated positively, although they require broader financial and hardware support. Promoting entrepreneurial attitudes and placing emphasis on the modern education of business personnel is of great importance.

The perspective of medical device manufacturers (hardware & MedTech)

Medical equipment manufacturers face unequal systemic competition. European MDR (Medical Device Regulation) certification is an exceptionally costly and lengthy process (taking about 2 years), whereas the American FDA pathway allows for market entry in just a few months. This places EU companies at a disadvantage compared to entities from the USA or China. One critical problem is the lack of effective enforcement of EU requirements against cheap imported devices (e.g., wristbands from China), which bypass rigorous safety standards, distorting the market. In medicine, the issue of the "explainability" of AI models and the necessity of conducting complex clinical trials also remain crucial.

Summary and recommendations

Europe is losing ground in innovation to the USA and China, and the current regulatory environment – despite standardisation ambitions which have their practical advantages – frequently hinders the development of domestic technologies. To reverse this trend, it is necessary to transition from diagnosing problems to implementing specific actions aimed at improving operating conditions:

- Levelling market opportunities: the strict enforcement of EU regulations against imported products (especially in MedTech) to eliminate unfair competition.
- Infrastructure and R&D: increasing investments in local computing centres (access to GPUs) and supporting projects for building language models (such as "Bielik").
- Streamlining regulations: the development of competent regulatory sandboxes, shortening certification processes (e.g., clinical trials), and considering the introduction of a "28th regime" to facilitate cross-border operations.
- Personnel education: the implementation of training programmes for product managers and mechanisms for technology transfer from universities to business.

TRACK: Safe digital space

Why should we care about disinformation in Africa?

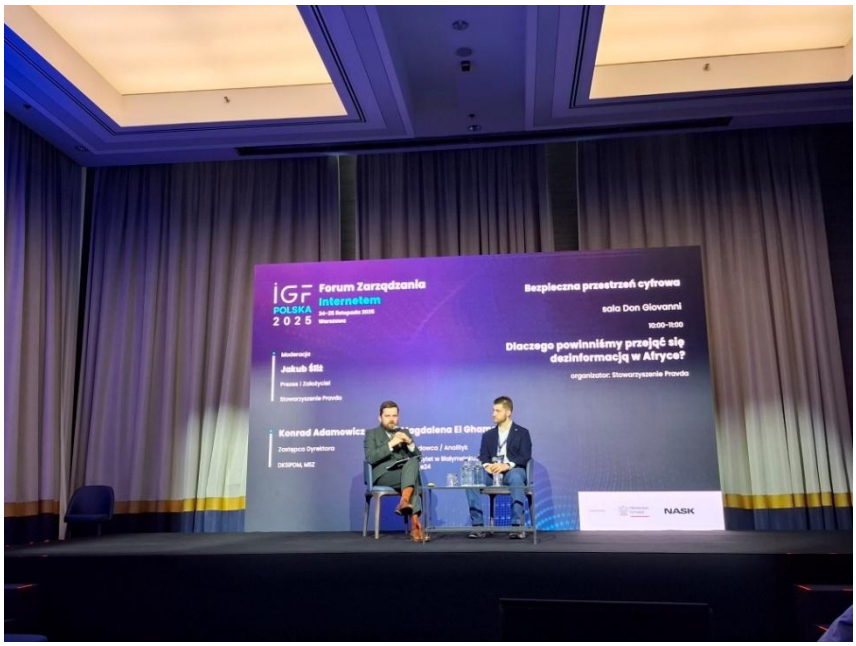

Photo: Ministry of Digital Affairs

Organiser
Pravda Association

Moderation

- **Jakub Śliż**, President and Founder of the Pravda Association, an organisation combating false information and educating about disinformation in Polish schools

Panellist

- **Konrad Adamowicz**, Deputy Director, Department of Strategic Communication and Counteracting International Disinformation, Ministry of Foreign Affairs

The session was dedicated to the growing importance of Africa within the global information ecosystem and the consequences of increasingly intensive disinformation activities conducted on the continent by state and non-state actors. A small, yet exceptionally engaged group of attendees participated in the meeting, which was confirmed by the large number of questions and discussions following the conclusion of the panel.

One of the key statements that resonated during the conversation was: “Today, it is not a question of whether we should care about Africa, but whether we can afford not to. Africa is our strategic partner today”. This quote aptly conveys the message of the entire session; a lack of engagement in the African information space signifies real political, economic, and security costs for Poland and Europe.

The discussion covered, among other things, the role of strategic communication, Poland's current activities in Africa, and key challenges such as growing narrative competition and the influence of third countries. The subject of entities currently actively investing in disinformation in Africa was addressed, and their operational mechanisms were analysed.

Particular attention was devoted to Russia and its hybrid approach, which combines information activities with the creation of a physical infrastructure of influence: cultural centres, "Russian houses", student exchange programmes, or networks of organisations associated with Russian public diplomacy. Such tools have proven to be somewhat innovative in the context of the fight for soft power and constitute a challenge for EU member states, including Poland.

Positive changes were also indicated: a visible shift and growing interest in Polish activities in Africa.

It was emphasised that Poland possesses a unique bargaining chip in relations with African countries: the lack of a colonial past, a positive image, and transformational experience, which can constitute value for African partners.

The significant interest in the topic was confirmed by numerous questions from the audience and the fact that, following the conclusion of the session, the audience continued to converse with the moderator and panellist, establishing contact in the context of further cooperation.

Conclusions and recommendations

1. Poland should more actively develop strategic communication in Africa, focusing on long-term relations rather than merely short-term interventions.
2. The activities of entities conducting disinformation campaigns must be monitored, and local partners should be supported in building information resilience.
3. It is crucial to combine information activities with an educational, cultural, and economic offer, just as other global players do.
4. Poland should leverage its positive image and lack of colonial past, building a unique brand in Africa.
5. The growing interest in this topic among participants demonstrates that further initiatives deepening the knowledge about Africa in Poland are necessary.

From the first click to digital strength! How to raise resilient children online.

Photo: Ministry of Digital Affairs

Organiser
NASK National Research Institute

Moderation

- **Anna Rywczyńska**, NASK National Research Institute

Panellists

- **Marta Brzoza,** Polish Chamber of Information Technology and Telecommunications, Orange
- dr **Szymon Wójcik**, Empowering Children Foundation
- **Mateusz Kupiec**, Institute of Law Studies of the Polish Academy of Sciences
- **Julia Piechna**, NASK National Research Institute
- **Maciej Groń**, NASK National Research Institute

The panel gathered representatives from academia, social organisations, the technical community, and the private sector. The aim was to discuss the challenges associated with the presence of children in the digital environment and to develop recommendations regarding the building of their resilience and online safety.

In the first part of the discussion, the current state of knowledge regarding Internet use by children was discussed. The experts pointed out that the youngest users commence their digital activity increasingly early, frequently on private devices, without appropriate adult supervision. The growing exposure to harmful content, peer violence, and risks associated with age-inappropriate features of social media platforms were highlighted. It

was also emphasised that the lack of effective age verification and unclear rules for designing digital services exacerbate the problem.

In the second part of the panel, representatives of organisations and the technology sector presented good practices, including educational initiatives, social campaigns, and solutions designed in accordance with the “safety by design” principle. It was emphasised that it is crucial to create services that take into account the needs and limitations of the child right from the design stage, including simpler privacy rules, default protective settings, and the limitation of elements conducive to addiction. Attention was drawn to the responsibility of the advertising industry and Internet platforms for limiting children's exposure to harmful and commercial content.

A significant part of the conversation was devoted to the role of adults: parents, teachers, and specialists. The experts indicated the necessity of developing digital competencies within the child’s environment so that they can use the Internet consciously and safely. The importance of media education, mental health prevention, and open communication between adults and young users was emphasised as well.

In the concluding section, the participants presented their joint recommendations:

1. Strengthening digital education – systemic actions in schools and for parents, shaping conscious and critical Internet use.
2. The development of “child-friendly by design” solutions: the introduction of effective, privacy-preserving age verification mechanisms and default protective settings for children’s accounts.
3. Cross-sectoral cooperation – close collaboration among academia, administration, NGOs, and business in the creation of safety norms and standards.
4. Strengthening regulations: support for EU initiatives, including the DSA and projects concerning the combating of illegal content, in order to increase platform accountability.
5. Building the digital resilience of children – the development of self-regulation skills, coping with social pressure, and recognising manipulation and disinformation.

The panel concluded by indicating that only a combination of educational, technological, and regulatory actions will make it possible to create a digital environment that genuinely supports the development of children and minimises threats.

The Internet as a tool of disinformation during hybrid warfare.

Photo: Ignacy Mościcki University of Applied Sciences in Ciechanów

Organiser

Ignacy Mościcki University of Applied Sciences in Ciechanów, Centre for Innovation and Technology Transfer

Moderation

- Second Lieutenant dr inż. **Sławomir Gromadzki**, Director of the Centre for Innovation and Technology Transfer, Ignacy Mościcki State Academy of Applied Sciences in Ciechanów
- dr **Dolores Gracja Piwek**, Assistant Professor, Deputy Director of the Institute of Civil Aviation Management, Faculty of Management and Command, War Studies University, Plenipotentiary of the Dean of the Faculty of Management and Command for the Promotion of the Educational Offer

Panellists

- prof. dr hab. inż. **Piotr Tadeusz Dela**, Chief Specialist at the Maritime Cybersecurity Centre, Polish Naval Academy
- dr hab. **Justyna Lipińska**, Vice-Dean for Scientific Affairs of the Faculty of Management and Command, War Studies University
- Lieutenant Colonel dr inż. **Dawid Orłowski**, Assistant Professor, Head of the Space Domain Operations Department, Military Faculty, War Studies University
- dr **Ewa Jakubiak**, University of Łomża, Dean of the Faculty of Law and Administration
- dr **Sandra Brzeska-Zagroba**, Assistant Professor, Ignacy Mościcki University of Applied Sciences in Ciechanów

The session aimed to present the latest research results and analyses regarding the issue of disinformation and information warfare under the conditions of hybrid warfare.
It was dedicated to a debate on the threats concerning the use of the Internet as a tool of disinformation in the context of the ongoing hybrid warfare, as well as identified acts of information warfare.

During the session, information was presented and conclusions were formulated based on the analysis of the use of the Internet as a tool of disinformation within the European Union following the outbreak of the war in Ukraine. This included positions on information security, cybersecurity, and cyber threats.

In the first part of the session, the main theses concerning the threats of disinformation as a tool of information warfare on the territory of the Republic of Poland were presented, arising from experiences with the hybrid warfare conducted on Polish territory and the full-scale military conflict in Ukraine.

In the subsequent stages of the debate, the panellists engaged in a discussion on key issues concerning:

- threats resulting from intentional and consistent forms of information transmission in the form of disinformation;
- manipulating and fabricating messages, including the creation of false documents, images and photographs, videos, fake news, and misleading information;
- creating a false worldview that is inconsistent with reality;
- inducing specific outcomes – causing the recipient to make erroneous decisions, as well as creating expected views, attitudes, patterns, and behaviours;
- preparing the state to counteract disinformation;
- the state's information security regarding the protection of classified information;
- public safety in the context of hybrid threats, information operations, disinformation, and intelligence activities.

The result of addressing these issues will be the organisation of a national scientific conference on hybrid warfare, and the development of a scientific monograph by a research team consisting of the moderators and panellists, focusing on the areas of cybersecurity, critical infrastructure, and disinformation.

Influencers and creators – are they fighting disinformation or spreading it?

Photo: Magdalena Górnicka-Partyka

Organiser
Magdalena Górnicka-Partyka

Moderation

- **Magdalena Górnicka-Partyka**, analyst and commentator on US politics, Fact-checking Educator, author of the “Stan Wyborczy” podcast

Panellists

- **Piotr Chęciński**, communications expert, former journalist and correspondent, former Editor-in-Chief of PolskieRadio24.pl
- **Olga Legosz**, entrepreneur, activist, initiator of such campaigns as Wspieram Sukces Kobiet (I Support Women's Success) and #PiwoToTezAlkohol (#BeerIsAlsoAlcohol)
- **Amelia Wojciechowska**, Analyst, Defence24.com

Disinformation is blamed on all sides – mainly as the work of anonymous bots or the fault of big tech companies. But where do content creators fit into all this, given that they often have a reach comparable to that of traditional media?

The panellists jointly examined the topic from various perspectives: traditional media, the creators themselves, and political analysis.

They discussed the fact that disinformation frequently does not look the way we assume it does; it is rarely an obvious fake that can be recognised at first glance. More often, it consists of various shades of grey, understatements, veiled suggestions, as well as

flooding the infosphere (including Twitter/X) with trivial topics that gain significance in public debate, thereby overshadowing what is truly important.

The panel guests also pondered what motivates creators to address safety-related topics: whether it is a sense of mission, a need for civic engagement, or perhaps simply the desire for profit, as they are, after all, individual entrepreneurs who are not subject to press law.

Together, they also examined attempts to regulate the activities of creators, such as the Chinese approach (where influencers speaking on topics such as the law must hold an appropriate diploma) or the Italian approach (where a register of influencers is to be introduced to combat unmarked advertising and support the protection of minors), searching for ideas and discussing whether there is space for this in Poland.

The main conclusions were that influencers and Internet creators should, on the one hand, be recognised as entities shaping the narrative in the infosphere regarding the critical topic of security, and on the other hand, it is worth considering the issue of regulating this space based on foreign models, especially in the context of the hybrid threats faced by Poland.

Children online: biometrics, AI, and the limits of protection.

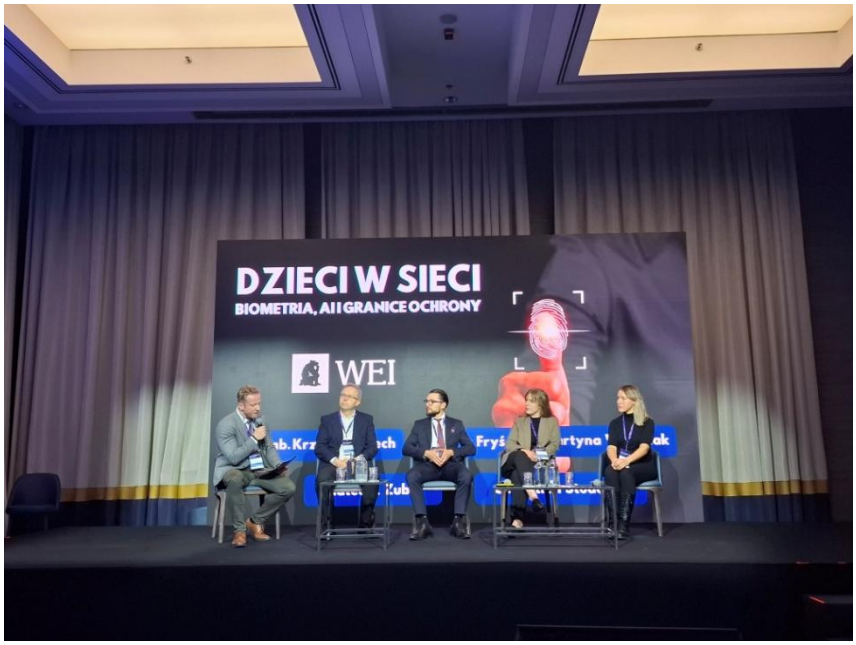

Photo: Ministry of Digital Affairs

Organiser
Warsaw Enterprise Institute Foundation

Moderation

- **Sebastian Stodolak**, Vice-President, Warsaw Enterprise Institute

Panellists

- dr hab. **Krzysztof Piech**, professor of Lazarski University

- **Agata Fryś**, psychologist with a decade of experience working with youth
- **Martyna Wojtczak**, psychologist running a psychoeducational Instagram profile
- **Mateusz Zubin,** Chief Growth Officer, IDENTT

The panel commenced with a discussion on the scale of online threats to children and youth. Psychologists Agata Fryś and Martyna Wojtczak confirmed that data from the NASK National Research Institute and the Empowering Children Foundation point to the almost universal exposure of young people to pornography, alongside escalating peer violence, hate speech, suicidal content, and the pressure of social comparison.

Research cited during the discussion demonstrates that over half of the teenagers who have attempted suicide had previously encountered online content romanticising suicide. The experts agreed that it is mobile phones – rather than computers – that are currently the primary tools for accessing harmful content, and parents have highly limited actual control over their use.

Should the state regulate child protection?
The moderator raised the topic of possible EU regulations, such as the so-called chat control. However, a NASK representative among the audience explained that the current draft does not envisage state access to encrypted messaging applications, and its scope is limited to detecting content depicting child sexual abuse.
Prof. Piech emphasised that market self-regulation is possible, yet it has not yielded satisfactory results in years. The market has failed to resolve the problem of protecting children from pornography; therefore, similar to the approach taken with alcohol or cigarettes, the state should establish safety frameworks, while avoiding overregulation leading to the flight of users to non-EU platforms.

Biometrics and artificial intelligence – are they realistic protection tools?
Mateusz Zubin, a cybersecurity expert from IDENTT, indicated that technologies enabling the biometric assessment of age based on a face or a video recording are already available and are being implemented in such industries as gambling. It is possible to create mechanisms in which:

- a facial scan is used on a one-off basis;
- data is immediately deleted;
- the system transmits solely the “of age/underage” information;
- no facial image databases of children are created.

Simultaneously, the expert emphasised that technology does not solve everything: children can bypass security measures, and the market reacts immediately by creating alternative platforms without age verification.

Digital education and hygiene – necessary, but insufficient.
The panellists drew attention to the vast disparities in the quality of digital education in schools. It frequently depends exclusively on the teacher's commitment.

The following issues were also highlighted:

- a lack of digital competencies among many parents;
- the promotion of bad habits (the continuous use of smartphones by adults);
- the dominance of mobile phones over computers, which significantly hinders control.

It was recommended that the purchase of a smartphone be postponed ("for as long as possible") and that children use computers located in common areas rather than in isolation.

Conclusions and panel recommendations:

- Online age verification should become a standard, but using a model based on data minimisation: solely confirming the "18+" status, without storing the user's image.
- The state should not introduce excessively invasive surveillance tools (e.g., interfering with encrypted messaging applications), as this may lead to abuse and infringement on citizens' privacy.
- Biometric technologies are already mature, but they require clear security standards and accountability on the part of providers.
- Digital education should be unified and mandatory, encompassing both children and parents.
- Digital hygiene is of crucial importance: limiting screen time, the joint use of technology, and discussing content and emotions.
- Solutions on the part of device manufacturers are necessary, e.g., permanent "underage mode" settings.

TRACK: Technologies of the present and the future

The financing model of the Baltic AI Gigafactory: what is the right combination of private and public capital?

Photo: Ministry of Digital Affairs

Organiser
National Institute of Telecommunications – National Research Institute

Moderation

- **Krzysztof Szubert**, Member of the UN IGF High-Level Leadership Panel; Plenipotentiary of the Director of the National Institute of Telecommunications

Panellists

- **Rafał Rosiński**, Undersecretary of State, Ministry of Digital Affairs
- **Anna Streżyńska**, Director, National Institute of Telecommunications
- prof. dr hab. **Marta Postuła**, Vice-President of the Management Board, Bank Gospodarstwa Krajowego
- **Stefan Kamiński**, President of the Management Board, National Chamber of Commerce for Electronics and Telecommunications

The discussion focused on the methods of financing an investment that has the potential to become a key element in building European technological sovereignty in the field of artificial intelligence.

The panel emphasised the strategic nature of the Baltic AI Gigafactory – a project potentially to be implemented by Poland in cooperation with the Baltic states and the

Czech Republic, assuming the creation of an infrastructure with a capacity of 30,000 to 100,000 GPUs and a value of 3 to 5 billion euros. Such a massive scale makes this an initiative of not only economic but also geopolitical significance, intended to enable Europe to develop its own AI models and access high-performance computing power without dependence on the infrastructure of external providers.

The most important conclusions from the panel were as follows:

- The project must be positioned as a government initiative of strategic importance to Poland and the region.
- The demand side is crucial – a documented need for computing power that will provide the investment project with stability and attractiveness for investors.
- A high level of state involvement, including the largest national financial institutions and the ministry responsible for digitisation, is essential for building a credible financial model.
- The Baltic AI Gigafactory can become the foundation for AI development in the region, supporting business, academia, and public administration.

The panel demonstrated unequivocally that if Poland wishes to play a tangible role in the European AI ecosystem, building its own world-class computing infrastructure is a necessity, and the Baltic AI Gigafactory represents the best opportunity to achieve this.

Artificial intelligence as a tool supporting the creation of coherent and effective law.

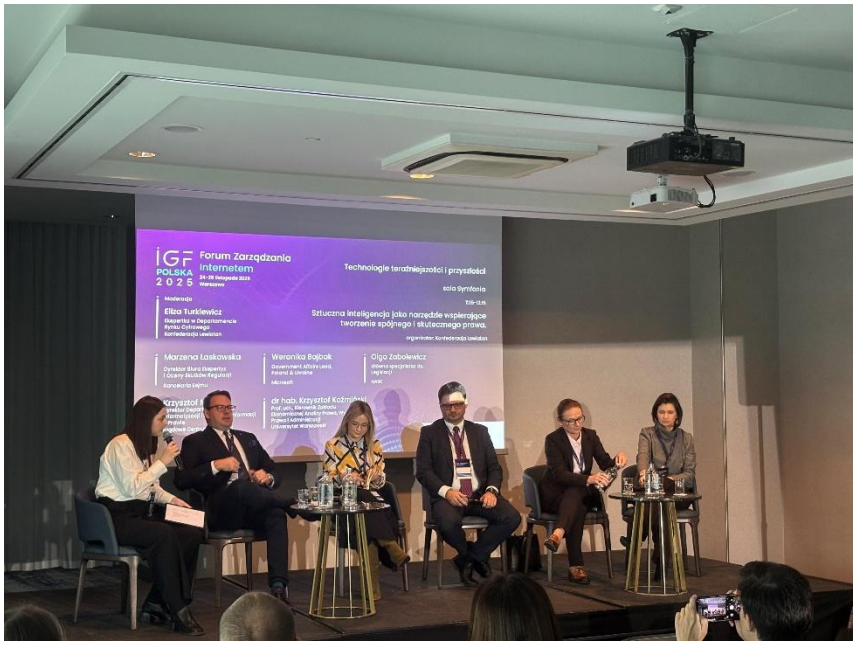

Photo: Ministry of Digital Affairs

Organiser
“Lewiatan” Confederation

Moderation

- **Eliza Turkiewicz**, Expert, Digital Market Department, “Lewiatan” Confederation

Panellists

- **Marzena Laskowska**, Director, Bureau of Research and Regulatory Impact Assessment, Chancellery of the Sejm
- **Weronika Bajbak**, Government Affairs Lead, Poland & Ukraine, Microsoft
- **Olga Zabolewicz**, Chief Legislation Specialist, NASK
- dr hab. **Krzysztof Koźmiński,** University Professor, Head of the Department of Economic Analysis of Law, Faculty of Law and Administration, University of Warsaw
- **Krzysztof Madej**, Director, Department of Computerisation and Legal Information Systems, Government Legislation Centre

During the debate, the experts unanimously emphasised that artificial intelligence can significantly increase the efficiency of legislative work, ranging from data analysis to document creation to public consultations. Simultaneously, it was noted that this potential remains largely unutilised due to systemic and organisational problems.

The participants drew attention to key actions already being undertaken within the administration. At the same time, it was emphasised that the official implementation schedule (2028–2029) is overly conservative, especially in comparison with dynamic international practices. The cited examples of Thailand and Ukraine demonstrate that AI can be utilised not only “at the end” of a process, but also as a tool for organising and analysing the current legal landscape.

Numerous application areas were indicated: the automation of database searches, the analysis of parliamentary documents, the creation and evaluation of RIAs (Regulatory Impact Assessments), the identification of legal conflicts, tracking changes in draft legislation, and the synthesis of positions from consultations.

Simultaneously, it was noted that the ease of content generation carries the risk of the overproduction of law and the deepening of regulatory chaos if appropriate mechanisms of supervision and explainability are not introduced.

The most severe barriers include fragmented and outdated IT systems, poor data quality, a shortage of specialists, a lack of an AI implementation strategy, legal and security risks, as well as competency gaps. The administration operates under a regime of extreme caution, which slows down the pace of innovation.

The panellists also drew attention to a deeper transformation of the legal system. It was indicated that the traditional positivistic model is becoming inefficient and requires a new approach in which AI can catalyse changes, both technical and conceptual, influencing the way law is interpreted and applied. In the longer perspective, this may lead to a edefinition of the fundamental concepts of legal theory.

Conclusions and recommendations:

- Poland should consider accelerating the implementation of AI, utilising it as early as the data organisation stage.
- It is necessary to create a coherent strategy for managing the digital transformation within legislative institutions.
- Improving data quality and modernising IT systems must be a priority.
- It is necessary to train personnel and build interdisciplinary teams.
- AI implementation should take into account the principles of accountability, transparency, and security.
- Pilot implementations of smaller AI tools are recommended in selected areas, particularly in RIAs and the analysis of consultations.

The discussion indicated unequivocally that AI is not merely a supporting technology, but a factor that can trigger a fundamental change in the way law is created and understood.

AI, LLMs, and AI Agents: an innovation accelerator or a digital Pandora's Box? The architecture of secure implementations.

Photo: Ministry of Digital Affairs

Organiser
WSB University

Moderation

- dr inż. **Karol Jędrasiak**, Deputy Director of the Technology Transfer Centre, WSB University

Panellists

- dr inż. **Krystian Mączka**, specialist in cybersecurity, computer crime, and personal data protection, lecturer at WSB University and the National School of Judiciary and Public Prosecution, court expert in computer forensics
- **Marietta Gieroń**, President, Kosciuszko Institute
- **Krzysztof Sierański**, MBA, CISSP, CEO of StillSec, cybersecurity expert
- **Maciej Groń**, NASK National Research Institute

The session focused on evaluating the threats resulting from the growing class of systems based on large language models and agentic artificial intelligence, which perform active operations on behalf of the user, encompassing sending correspondence, modifying registers, calling APIs, and initiating operational processes. The experts presented a unified technological, legal, and organisational perspective, emphasising that the transition from the predictive and generative phase to the agentic phase signifies a qualitative change in the risk paradigm. With the automation of decision-making and the delegation of tasks, it becomes possible to automatically implement erroneous or manipulated actions without human oversight.

The risks associated with model fine-tuning were discussed. Attention was drawn to the threats of training data poisoning and the problem of the unintentional disclosure of sensitive information during the operation of a model fine-tuned on internal resources. It was noted that fine-tuning should take place in secure cloud environments with access control to weights. The experts drew attention to the phenomenon of erroneous model responses and their susceptibility to manipulation, which in operational environments can lead to an escalation of risk.

The discussion focused on the architecture of Agentic AI and new attack vectors, such as prompt injection leading to the coercion of undesirable actions, as well as the hijacking of agents' decision-making logic. Attention was drawn to the difficulty of monitoring such systems and the limited transparency of cloud models, which hinders auditing and impacts stability as well as costs. It was also emphasised that many implementations of LLMs and agents are created too rapidly, without comprehensive security tests and without clear rules regarding the delegation of privileges.

The panel discussed the Zero Trust approach for AI, which assumes a lack of default trust even towards one's own agents. It was recommended to grant them only the minimum privileges and to maintain strict access control to tools, APIs, and databases. The importance of continuous risk assessment, monitoring agent activities, and limiting automation in critical areas was emphasised. The need for clear rules regarding the use of AI, determining permissible data and the level of system autonomy, was also indicated.

Conclusions and recommendations

The session demonstrated the necessity of immediately adapting security policies to a new class of threats resulting from the operation of agentic AI systems. The most important conclusions concern the need to depart from blind trust in the results generated by LLMs, as well as the necessity of ensuring full human control over actions with legal, financial, and operational consequences. The importance of model transparency,

the standardisation of procedures, resilience to manipulation, and ensuring the possibility of migrating AI systems between different cloud providers to avoid dependence on a single service provider was emphasised.

The most important recommendations:

- the development of standards for testing agent security and procedures for assessing resilience to prompt injection;
- mandatory human control over high-risk decisions and the limitation of agent autonomy in critical areas;
- the application of the Zero Trust approach, i.e., granting agents only the minimum necessary privileges and strict control of all the tools they utilise;
- organising and securing the model fine-tuning process, including the thorough cleansing of training data from elements that could disclose sensitive information;
- ensuring transparency in the operation of models, the documentation of data sources, and the possibility of migration between service providers.

Between analysis and prediction – how algorithms are changing social policy

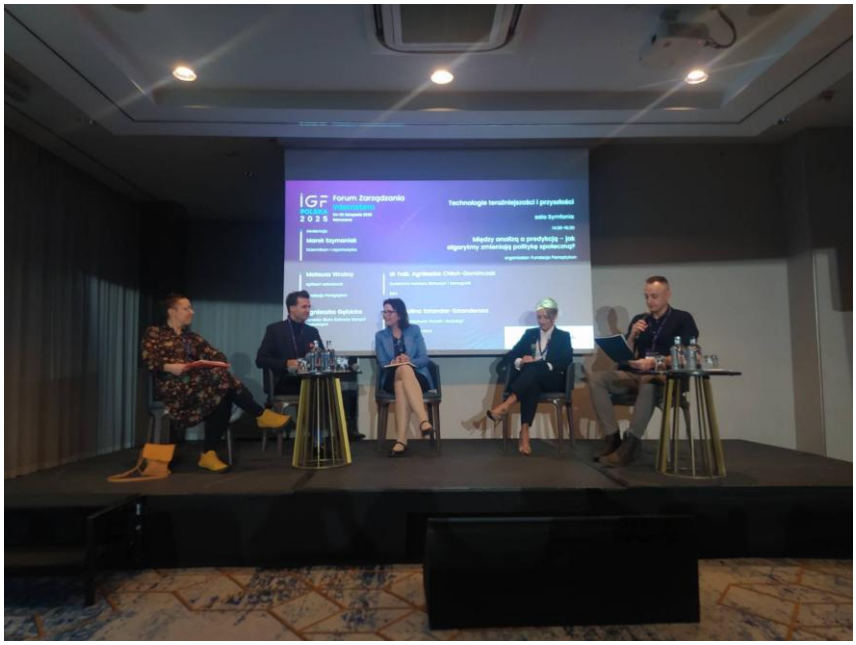

Photo: "Panoptykon" Foundation

Organiser
"Panoptykon" Foundation

Moderation

- **Marek Szymaniak**, Journalist and Reporter

Panellists

- **Mateusz Wrotny**, Panoptykon Foundation, Trainee Advocate
- dr hab. **Agnieszka Chłoń-Domińczak**, Director of the Institute of Statistics and Demography, SGH Warsaw School of Economics

- **Agnieszka Gębicka**, Director of the Personal Data Protection Office at the Social Insurance Institution (ZUS)
- dr **Karolina Sztandar-Sztanderska**, Institute of Philosophy and Sociology of the Polish Academy of Sciences

Algorithms are increasingly supporting decision-making in the area of public benefits and services. Their use can streamline administrative operations, but it simultaneously raises questions concerning transparency, privacy protection, the risk of discrimination, and limited access to appeal mechanisms. During the session, the panellists (representatives of public institutions, academia, and civil society) discussed how automation affects social policy, individual rights, and the public interest, considering both its opportunities and challenges.

The discussion began by emphasising that the automation of public administration is becoming one of the key areas of the state's transformation. The moderator outlined the principal questions: what benefits and risks automation brings, and how public institutions currently utilise algorithms and decision-making systems.

The panellists indicated that automation yields significant benefits, particularly where a large volume of data and applications is processed. In such areas, algorithmic solutions relieve employees, allowing them to focus on decisions that require interpretation. Simultaneously, it was emphasised that automation does not merely generate savings, but also serves as a tool for improving the quality of processes. Algorithms, if designed correctly, limit human error and streamline data analysis. Examples of already functioning solutions were highlighted, including data processing at the Social Insurance Institution (ZUS), which supports the auditing of contribution payers.

Subsequently, the panellists drew attention to the associated threats. Cases from the Netherlands, Sweden, and Australia were recalled, where algorithms used to identify abuse in the collection of social benefits led to discrimination and unjust decisions against citizens. Overworked officials may simply replicate the decisions made by algorithms without understanding how they work. The quality of training data was also accentuated: if it is biased or incomplete, the algorithm will reinforce existing inequalities. Data may fail to reflect the complexity of social life, leading to oversimplifications and errors.

The panellists indicated that citizens must know how decisions are made and what data is being utilised. They also emphasised that citizens should have the right to appeal, and that a lack of transparency leads to a loss of trust. Issues of official communication were also addressed, highlighting the need for more well-thought-out and comprehensible messages sent to citizens.

Summarising the discussion, the panellists agreed that the effects of automation depend on the quality of training data and the transparency of the algorithm. It was emphasised that the state cannot mindlessly copy corporate solutions, and that administrative systems must be designed with the protection of the citizen in mind. Simultaneously, attention was drawn to the fact that Poland has the opportunity to learn from the mistakes of other countries and should utilise this chance, rather than repeating them.

Quantum technologies – what is in it for Poland and business?

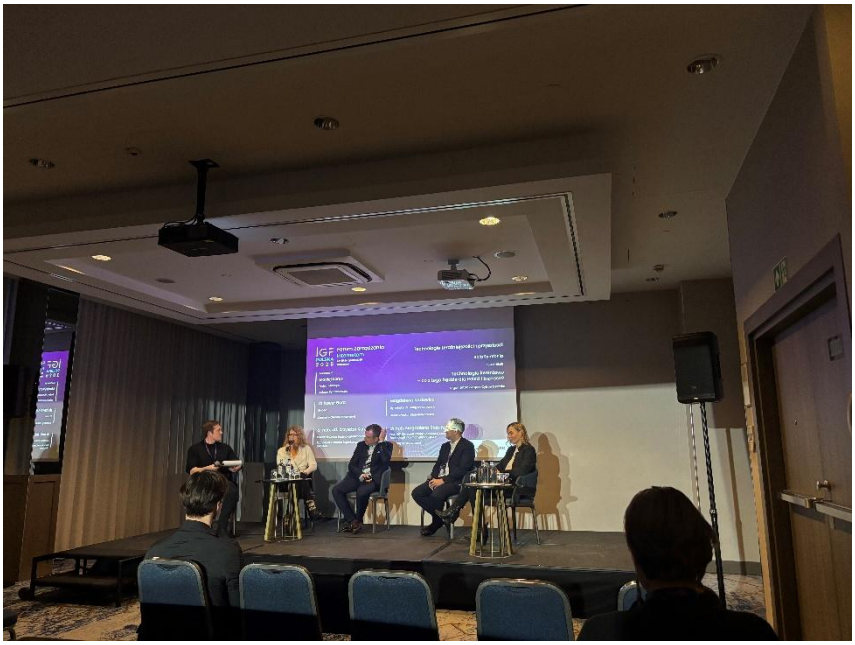

Photo: Ministry of Digital Affairs

Organiser
ZIPSEE "Digital Poland"

Moderation

- **Maciej Korus**, Project Manager, ZIPSEE "Digital Poland"

Panellists

- dr **Paweł Góra**, Expert, Centre for Information Technology
- **Magdalena Kasiewicz**, Cloud Services Director, Hewlett Packard Enterprise Poland
- dr hab. inż. **Krzysztof Kurowski**, Head of the Quantum Technologies Department, Poznań Supercomputing and Networking Center
- dr hab. **Magdalena Stobińska**, Professor at the University of Warsaw, Head of the "QCAT" Quantum Information Technologies Research Group at the University of Warsaw

Quantum technologies are increasingly appearing in the digital strategies of governments and major companies. The aim of the session was a discussion at the decision-making level: where quantum computing can realistically bring value, what the time horizon is, and what challenges need to be addressed in advance: competencies, financing, public-private partnerships, standards, and responsible implementations. The discussion concerned how not to miss the moment, while also not succumbing to the hype: how to conduct pilot programmes with clear business goals, how to secure long-lived data against future breakthroughs, and how to build an ecosystem that translates research into benefits for citizens and the economy.

The session began with a brief introduction concerning the history of quantum technologies and their impact on technological advancement, as well as an overview of the expectations and hopes associated with current progress in this area.

The moderator outlined the landscape of currently existing EU strategies regarding quantum technologies and the most important projects in this field in which Poland participates.

The discussion commenced with a description of the current landscape of quantum technology development, research progress, and readiness for commercial implementation, emphasising the importance of building a broad development ecosystem. "*It is difficult to unequivocally forecast the time required for the technology to enter the market. Essentially, we can distinguish three main areas of progress. The first is quantum computing technologies, namely computers, hardware, and algorithms. We have made significant progress in the area of hardware, but a greater problem exists with algorithms. The second crucial area is communication with cryptography, in which we are already observing the first practical implementations. This market is home not only to major players, but also to a whole ecosystem of start-ups that are implementing these technologies. We clearly see a very positive effect of the value chain here, which is needed for ideas to turn into products. Finally, the third significant area of quantum technologies is imaging and highly sensitive measurements",* said Magdalena Stobińska, emphasising that quantum technologies in Poland remain the domain of the university environment. "*In Poland, these technologies are most frequently developed at universities through research grants, without the participation of the private sector. We would, however, like to see greater investments related to research into these technologies on the Polish market. Unfortunately, we see few innovative companies in Poland offering positions in R&D departments",* she added.

The experts admitted that recent, intensive investments in quantum hardware in Poland constitute a solid and necessary foundation for the development of technologies ready to enter the market. "*Quantum systems in Poland represent a starting point for building further layers of abstraction, particularly the creation of services and tools for end users",* said Krzysztof Kurowski. The guests emphasised that the national quantum ecosystem urgently requires not only greater financial outlays, but also a consolidated, comprehensive strategy and top-down support from public administration. "*Naturally, greater financing must be allocated to the development of the quantum ecosystem, but the community has been appealing for some time for the creation of a Polish quantum strategy or quantum policy, and indeed, work on such a document has commenced this year",* said Paweł Góra. "*If Poland does not want to fall behind the global pack, it must possess such a strategic document",* he explained. The remaining interlocutors agreed that state involvement and top-down action for this ecosystem are essential for quantum progress in Poland.

As was emphasised, the strategy should not be reduced to a document merely outlining goals and investment declarations. "*We need a coherent vision of the involvement of science, administration, and business, as well as a clear plan from research through to the introduction of products to the market. Public-private partnerships can play a crucial role in this process. It is also worth including in the strategy a component for building competencies and a talent pool",* said Krzysztof Kurowski. *"Particular attention should be devoted to how to ensure that the goals set out in the strategy are implemented. Progress*

monitoring mechanisms, detailed guidelines, and objectives are required", added Magdalena Stobińska.

Conclusions from the discussion:

- The development of quantum technologies in Poland requires the creation of a coherent, comprehensive strategy.
- The strategy for quantum technologies in the country should focus on:
  - building an ecosystem for effective science-business cooperation and public-private partnerships;
  - ensuring adequate financial outlays for research and development;
  - designating specific, measurable goals and actions;
  - engaging the largest possible group of entities (academia, public administration, and business, including SMEs);
  - ensuring the development of competencies and the talent pool necessary for the advancement and implementation of quantum technologies.

Exhibition zone

An exhibition area was set up as part of the IGF Poland 2025. The stands were set up and run by the following organisations:

- Ministry of Digital Affairs;
- Ministry of Family, Labour and Social Policy;
- Ministry of Science and Higher Education and the Information Processing Centre;
- NASK – National Research Institute;
- National Institute of Telecommunications – National Research Institute;
- Digital Poland Projects Centre;
- "Perspektywy" Education Foundation;
- Digital Dialogue Association.

Conference recordings

Recordings from the individual thematic tracks are available on the Ministry of Digital Affairs' YouTube channel at the following links:

Inauguration – introductory speech – panel discussions

Track: SMART CITY: HUMANS AT THE CENTRE OF SMART SOLUTIONS

Track: POLAND AND EUROPE IN THE WORLD OF TECHNOLOGICAL COMPETITION

Track: SAFE DIGITAL SPACE

Track: TECHNOLOGIES OF THE PRESENT AND THE FUTURE

Contact

Questions regarding the national initiative of IGF Poland can be directed to the following address: IGFPolska@cyfra.gov.pl

Feel free to contact us!