The expansion of the digital inclusion policy domain in Belgium

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To understand how the policy domain of digital inclusion has expanded, the Vrije Universiteit Brussel and Universiteit Gent conducted two studies in which we investigated the recent trends in digital inclusion policies in Belgium. The studies are part of the scientific monitoring and research in the framework of the 'Iedereen Digitaal' action plan by the Flemish Government (Vlaamse Overheid, n.d.). The research shows that governments in Belgium have significantly invested in digital inclusion between 2020 and 2024. In fact, each level of government in Belgium committed to the topic, although they approached it from different policy perspectives and competences. We conducted an analysis of relevant coalition agreements, policy decisions, and policy briefs, which allowed us to identify trends and gaps in the current policy domain of digital inclusion in Belgium. Additionally, the analysis highlights differences in the policy approaches of the various levels of governments. This policy brief offers a summary of the main findings of this research, along with concrete recommendations for policymakers.

Highlights
Between 2020 and 2024, there was a significant expansion of digital inclusion policies in Belgium: During the previous legislative term (2020-2024), all governments in Belgium actively engaged and invested in the development of digital inclusion policy programs.
Digital inclusion policies are developed under a wide range of competences: Digital inclusion policies are developed in a total of 15 different policy domains. However, not all levels of government engage with digital inclusion through the same policy domains. Additionally, some policy domains barely or do not engage with digital inclusion, despite pressing needs related to digital inequalities.
Belgian policymakers predominantly rely on subsidies to develop digital inclusion policies: Policymakers mainly use one subtype of substantial instruments, namely subsidies to develop policies. To a lesser extent, they use information instruments, such as information campaigns that target citizens. We identified only one policy decision that introduces regulation. Similarly, Belgian policymakers barely made use of procedural instruments during the previous legislative term. In other words, there is little diversity in the policy instruments used by digital inclusion policymakers in Belgium.
There is a lack of coordination and cooperation between policy domains: While all governments in Belgium approach digital inclusion as a transversal policy theme, our research shows that only two out of six governments consciously coordinate their digital inclusion policy efforts and cooperate across policy domains. A lack of coordination and

1. What is a digital inclusion policy?

In response to the Covid-19 health crisis, the European Union (EU) developed NextGenerationEU, a recovery plan that provided financial resources to the EU Member States. A portion of these funds was earmarked for policy initiatives related to the digital transition. This spurred several EU Member States, among which Belgium, to develop policy programs with an explicit focus on digital inclusion (Verhaert et al., 2023; Verhaert et al., 2024a).

We define digital inclusion policies as governmental instruments designed to respond to one or more aspects of digital inequalities in a structured and targeted manner (Verhaert et al., 2024b). The goals of large-scale digital inclusion policies can be multifaceted. At a macro scale, Mori (2011) distinguishes three different objectives of digital inclusion: 1) digital inclusion to promote economic development, 2) digital inclusion as a solution to social problems, and 3) digital inclusion as a tool for an individual's multidimensional development. The latter objective is strongly linked to an individual's ability to exercise their civil rights.

Digital inclusion policies are typically designed to target one or several aspects of digital inclusion. They do so by 1) facilitating access to technology and infrastructure, 2) fostering digital skills, 3) providing support in the use of digital technologies and applications, or 4) enhancing the user-friendliness and accessibility of digital services (Asmar et al., 2020). The latter refers to the provision of essential services in accessible ways, for instance, through the maintenance of physical contact points or through the integration of accessibility principles into the design of digital services (Rothe et al., 2024). This is important as the inaccessible design of digital public services contributes to digital inequalities (Park & Humphry, 2019; Schou & Pors, 2019).

2. Digital inclusion policies in Belgium

We conducted an analysis of the coalition agreements, policy decisions, and policy briefs of six governments in Belgium. This allowed us to identify trends and gaps in the current policy domain of digital inclusion in Belgium. During the previous legislative term (2020-2024), we observe a growing political commitment to digital inclusion between 2020 and 2024. All six governments in Belgium engaged with digital inclusion through the development of new policy programs and underscored digital inclusion in coalition agreements. In terms of concrete policy programs, we observe a significant increase in digital inclusion policies since the start of the Covid-19 health crisis in 2020. This expansion appears through the development of new policy initiatives as a direct response to challenges related to the Covid-19 health crisis on the one hand, and the integration of policy initiatives into Belgium's Recovery and Resilience Plan on the other hand (Dermine, 2021).

From 2021 onwards, both the number and budgets of digital inclusion policy programs in Belgium grew. With regard to the resources made available for digital inclusion programs, there are differences between the various governments. In absolute terms, the Flemish government has invested more resources in digital inclusion policy programs during the previous legislative term, compared to the other regional governments or the federal government.

3. The broadening and innovation of digital inclusion policies

Between 2020 and 2024, Belgian policymakers developed digital inclusion policies under a total of 15 different competences. The domains of Education, Work and Economy, and Equal Opportunities developed the highest number of digital inclusion policies. Policymakers from various domains started engaging with the topic for the first time, such as the domains of Public Services, Local Authorities and Equal Opportunities. This "broadening" of digital inclusion policies points to an increased awareness of the topic and has opened the door for policy innovation. At the same time, however, some policy domains have not or have barely engaged with digital inclusion. Examples of such domains are Health, Justice, Asylum and Migration, and Energy. While Belgian policymakers in these domains have barely engaged with digital inclusion as a policy topic, these are domains where people face particular vulnerabilities in terms of digital inequalities (see, for instance, Chambers et al., 2022; Moran, 2023; Sourdin, 2021; Yao et al., 2022).

Most of the digital inclusion policies mention specific, albeit broad, groups of beneficiaries. A total of 27 beneficiary groups are mentioned explicitly in the policy documents. While this number appears high, some beneficiary groups with high and specific needs regarding digital inequalities, such as persons with disabilities, care users and caregivers, are only rarely mentioned.

Digital inclusion policies in Belgium engage a broad and diverse mix of societal stakeholders. Stakeholders with an explicit expertise in digital inclusion were able to deepen their expertise due to the "broadening" of digital inclusion policies, while stakeholders without an explicit expertise in digital inclusion were also actively engaged with new policy initiatives. Examples of such stakeholders include government agencies such as the Home Affairs Agency. Stakeholders working at the local level, such as local governments and CPAS, were also actively engaged in the roll-out of various policy plans.

Before 2021, most digital inclusion policies focused heavily on the first aspect of digital inclusion, i.e., access to the internet and digital devices. After 2021, policymakers developed policies that also focus on the other three facets of digital inclusion (i.e., skills, support, and accessibility of digital services). The second facet of digital inclusion, i.e., fostering the development of digital skills, becomes and remains the focus of the majority of new policy initiatives. Additionally, several policy initiatives take more innovative approaches to digital inclusion, for example, by focusing on the accessibility of digital services or by stimulating the development of digital inclusion policies at the local level. In recent digital inclusion policies, policymakers appear to recognize that digital inequalities cannot be 'fixed' through one-off interventions, and that certain parts of the population will always require support to use digital services or will wish to retain access to non-digital services. Briefly put, as of 2021, Belgian policymakers have started taking more innovative approaches to the design of digital inclusion policies.

4. Policy instruments for digital inclusion

Policy instruments are an important part of policymaking and provide the 'means' by which the 'ends' of policy are achieved (Howlett, Mukherjee & Woo, 2018). By studying the instruments that policymakers apply, we can understand the nature and direction of policy dynamics (Capano, Pritoni & Vicentini, 2020). In general, we can distinguish between two main types of policy instruments: 1) substantial instruments and 2) procedural instruments (Howlett, 2018). Substantive policy instruments are used to directly influence policy outcomes, in particular by 1) introducing or amending regulations, 2) distributing resources, e.g., in the form of investments or grants, and 3) providing information and education. Procedural policy instruments are tools that can influence the way policies are formulated and implemented

(Bali et al., 2021, p. 298). In other words, through the use of procedural policy instruments, governments are able to adapt their own processes of policy making and policy implementation (Howlett, 2019).

Typically, various types of policy instruments are combined, in what are called 'instrument mixes' (Capano & Howlett, 2020). To address the multifaceted challenges of complex problems, such as digital inequalities, it is advisable to combine various policy instruments. Here, the idea is that a diverse instrument mix will contribute to more efficient policies (Capano & Howlett, 2020). Based on our policy analysis, we conclude that the instrument mix in Belgian digital inclusion policy shows little diversity. Policymakers in Belgium predominantly rely on substantial policy instruments to develop digital inclusion policies. They mainly use subsidies to achieve policy goals, and to a lesser extent, information tools, such as informational campaigns that target citizens. Throughout the previous legislative term, only one policy decision introduced regulation. In 2023 and 2024, a small minority of policymakers have started exploring the use of procedural instruments. It remains to be seen whether this new trend will be continued during the next legislative terms.

5. Policy integration of digital inclusion

When it comes to tackling complex policy issues, such as digital inequalities, policies risk overlapping or conflicting with each other. As a result, inefficient or ineffective policy solutions may be proposed, or new problems may arise (Briassoulis, 2004). To avoid this problem, a high level of coordination between different policy domains is required. Coordination between policy domains can be organized through *policy integration*, i.e., the development of policies in one or more domains, that consider policy objectives in other, possibly adjacent domains (Giessen, 2011a; Giessen, 2011b; Tosun & Lang, 2017). In other words, policy integration is characterized by the cooperation of actors from different policy domains (Tosun & Lang, 2017, p. 554). To evaluate the level of policy integration in the digital inclusion domain, we looked at two indicators: 1) the broad scope of digital inclusion policies, or the presence of policies in different domains, and 2) the level of policy coordination and cooperation between different domains where digital inclusion policies are developed.

As we have described above, Belgian policymakers approach digital inclusion as a transversal policy theme. However, this transversal approach to digital inclusion does not always translate into policies that are shaped through collaborations between different domains. Indeed, in terms of the *scope* of digital inclusion policies, we can assess the policy integration of digital inclusion positively. However, regarding the level of *policy coordination and cooperation*, we see stark differences in the approach of the six different governments in Belgium.

In our research, we identified three different approaches to the coordination of digital inclusion policies. In the first approach, which we call the "broad approach to coordination," we see no or very little effort for coordinating collaborations between different policy domains. In this approach, digital inclusion policies are deployed from a wide variety of domains, but this is typically done independently, without references to other existing policies or adjacent policy domains. Four governments can be categorized under this approach: the Flemish government, the Federal government, the government of the German-speaking Community, and the government of the French-speaking community. Second, the "concentrated coordination approach" places a strong emphasis on the coordination of collaborations between domains, as the overall policy vision departs from one specific domain. While this approach leads to the construction of a coherent policy vision, this does not necessarily guarantee cooperation between different domains. We categorize one government, that of the Brussels Capital Region, under this approach. Finally, the third approach also focuses on coordinating collaborations across domains, allows for various domains to take the lead in

developing a global policy vision for digital inclusion. We call this the "linked coordination approach," and categorize the Walloon government under this approach.

To promote policy integration of digital inclusion, the coordination of collaborations between different domains is necessary. This can be done, for example, by development of digital inclusion policies that follow the "linked coordination approach," in which policymakers from various domains actively and equally collaborate on the development and implementation of a digital inclusion policy vision. On the one hand, stronger coordination contributes to the more efficient application of policy instruments. On the other hand, developing a coherent policy vision with policymakers from different domains creates wider support for the policy.

> ### Actively engage with digital inclusion policy during the new legislative term
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> *Between 2020 and 2024, we observe a previously unseen political commitment to digital inclusion. During the previous legislative term, all governments in Belgium actively engaged with digital inclusion policy. In recent digital inclusion policies, policymakers appear to recognize that digital inequalities cannot be 'fixed' through one-off interventions, and that certain parts of the population will always require support to use digital services or wish to retain access to non-digital services. As such, policymakers should ensure that digital inclusion will also be considered during the new legislative term.*

> ### Some domains, such as Health, Justice, Asylum and Migration, and Energy, should engage more heavily with digital inclusion policy
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> *Belgian policymakers approach digital inclusion as a transversal topic and have developed policies in a wide variety of domains. However, some policy domains barely engage with digital inclusion in a meaningful way, despite pressing challenges related to digital inequalities. Policymakers in the domains of Health, Justice, Asylum and Migration, and Energy, should be incentivized to actively integrate digital inclusion in new policies. In these domains, people face specific vulnerabilities in terms of digital inequalities.*

> ### Policymakers should diversify the instruments used in digital inclusion policies
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> *Our research shows that the policy instruments used in Belgian digital inclusion policies show little diversity. Policymakers in Belgium predominantly rely on subsidies to achieve policy goals, and to a lesser extent information tools, such as informational campaigns that target citizens. In addition to these instruments, policymakers should explore the use of other instruments during the next legislative term (e.g., through the introduction of regulation or the use of procedural instruments). To address the multifaceted challenges of complex problems, such as digital inequalities, it is advisable to combine various policy instruments at once.*

> ### Stronger coordination and cooperation between policy domains is needed
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> *While all governments in Belgium approach digital inclusion as a transversal policy theme, our research shows that only two out of six governments consciously coordinate their digital inclusion policy efforts. The policy domain of digital inclusion in Belgium is relatively young; as the domain becomes more mature, more consideration should be given to policy integration. Stronger coordination between different policy domains is needed to promote the policy integration of digital inclusion.*

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The DICE (Digital Inclusion and Citizen Engagement) unit conducts research on inequalities and power imbalances in a digital age.
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By 2024, the Flemish department of domestic governance (ABB) wants every local government to have a local digital inclusion policy and program. This should ensure that citizens can acquire internet access, skills and support in using essential internet services in their immediate environment. However, until now it is unclear how this aim can be implemented in practice. Research group mict (UGent) and SMIT (VUB) are therefore conducting monitoring and policy research.
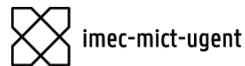
References

Asmar, A., Van Audenhove, L., & Mariën, I. (2020). De invloed van sociale ondersteuning op digitale zelfredzaamheid: Wie helpt wie, op welke manier en wanneer bij het gebruik van digitale toepassingen? In Coene, J., Ghys, T., Hubeau, B., Marchal, S., Remmen, R., Vandenhole, W. & Van Haarlem, A. (Eds.). *Yearbook Poverty and Social Exclusion 2020*. Universitaire Stichting voor Armoedebestrijding.

Bali, A. S., Howlett, M., Lewis, J. M., & Ramesh, M. (2021). Procedural policy tools in theory and practice. *Policy and Society, 40*(3), 295-311.

Briassoulis, H. (2004). Policy integration for complex policy problems: What, why and how. *Greening of Policies: Interlinkages and Policy Integration, Berlin,* 3-4.

Capano, G., & Howlett, M. (2020). The knowns and unknowns of policy instrument analysis: Policy tools and the current research agenda on policy mixes. *Sage Open, 10*(1), 2158244019900568.

Capano, G., Pritoni, A., & Vicentini, G. (2020). Do policy instruments matter? Governments' choice of policy mix and higher education performance in Western Europe. *Journal of Public Policy, 40*(3), 375-401.

Chambers, J., Robinson, C., & Scott, M. (2022). Digitalisation without detriment: A research agenda for digital inclusion in the future energy system. *People, Place and Policy Online*, 177-92.

Dermine, T. (2021). *Nationaal Plan voor Herstel en Veerkracht België*. Belgium.be. https://dermine.belgium.be/sites/default/files/articles/NL%20-%20Nationaal%20plan%20voor%20herstel%20een%20veerkracht_1.pdf

Giessen, L. (2011a). Horizontal policy integration. *Green issues and debates*, 293-296.

Giessen, L. (2011b). Vertical policy integration. *Green issues and debates*, 486-489.

Howlett, M. (2019). Procedural policy tools and the temporal dimensions of policy design. Resilience, robustness and the sequencing of policy mixes. *International Review of Public Policy, 1*(1: 1), 27-45.

Howlett, M. (2018). Policy instruments and policy design choices: Selecting substantive and procedural tools in public policymaking. In *Routledge handbook of policy design* (pp. 77-86). Routledge.

Howlett, M., Mukherjee, I., & Woo, J. J. (2018). Thirty years of research on policy instruments. *Handbook on policy, process and governing,* 147-168.

Moran, C. (2023). The 'connected migrant': A scoping review. *Convergence, 29*(2), 288-307.

Mori, C.K. (2011). *Políticas públicas para inclusão digital no Brasil: aspectos institucionais e efetividade em iniciativas federais de disseminação de telecentros no periodo 2000-2010.* 351 f. Tese (Doutorado em Servigo Social) Instituto de Ciencias Humanas, Universidade de Brasilia, Brasilia.

Park, S., & Humphry, J. (2019). Exclusion by design: intersections of social, digital and data exclusion. *Information, Communication & Society, 22*(7), 934-953.

Reisdorf, B., & Rhinesmith, C. (2020). Digital inclusion as a core component of social inclusion. *Social inclusion, 8*(2), 132-137.

Rothe, F., Verhaert, P., Anrijs, S., van Leeuwen, C., Van Audenhove, L., & Ponnet, K. (2024, June). *Digitale inclusie en digitale transformatie: Een multidimensionale benadering van inclusieve digitale dienstverlening*. Report commissioned by the Flemish Government. Brussel: imec-SMIT, Vrije Universiteit Brussel.

Schou, J., & Pors, A. S. (2019). Digital by default? A qualitative study of exclusion in digitalised welfare. *Social policy & administration, 53*(3), 464-477.

Sourdin, T. (2021). Better access to justice? In: *Judges, Technology and Artificial Intelligence* (pp. 155-188). Edward Elgar Publishing.

Tosun, J., & Lang, A. (2017). Policy integration: Mapping the different concepts. *Policy studies, 38*(6), 553-570.

Verhaert, P., Van Audenhove, L., Anrijs, S. & Ponnet, K. (forthcoming). *Tweede jaarlijkse stand van zaken van het digitale-inclusiebeleid in België*. Report commissioned by the Flemish Government. Brussel: imec-SMIT, Vrije Universiteit Brussel.

Verhaert, P., Van Audenhove, L., Anrijs, S. & Ponnet, K. (2024a, January). *Jaarlijkse stand van zaken van het digitale-inclusiebeleid in België*. Report commissioned by the Flemish Government. Brussel: imec-SMIT, Vrije Universiteit Brussel.

Verhaert, P., Anrijs, S., Van Audenhove, L., & Ponnet, K. (2024b, December). Digitale inclusie op de lokale beleidsagenda: hoe ontwikkelen vlaamse lokale besturen digitale-inclusiebeleid? In Van Dyck, J. et al. (Eds.), *Cahier 13. Digitale inclusie: lokale besturen aan zet* (pp. 47-70). Brussel: Politeia.

Verhaert, P., Van Audenhove, L., Anrijs, S. & Ponnet, K. (2023, June). *Digitale inclusie op lokaal niveau: Inzichten uit vijf Europese landen.* Report commissioned by the Flemish Government. Brussel: imec-SMIT, Vrije Universiteit Brussel.
Vlaamse Overheid. (n.d.). *Iedereen Digitaal.* Vlaanderen.be.
https://www.vlaanderen.be/samenleven/toegankelijkheid/iedereen-digitaal.

Yao, R., Zhang, W., Evans, R., Cao, G., Rui, T., & Shen, L. (2022). Inequities in health care services caused by the adoption of digital health technologies: scoping review. *Journal of medical Internet research, 24*(3), e34144.