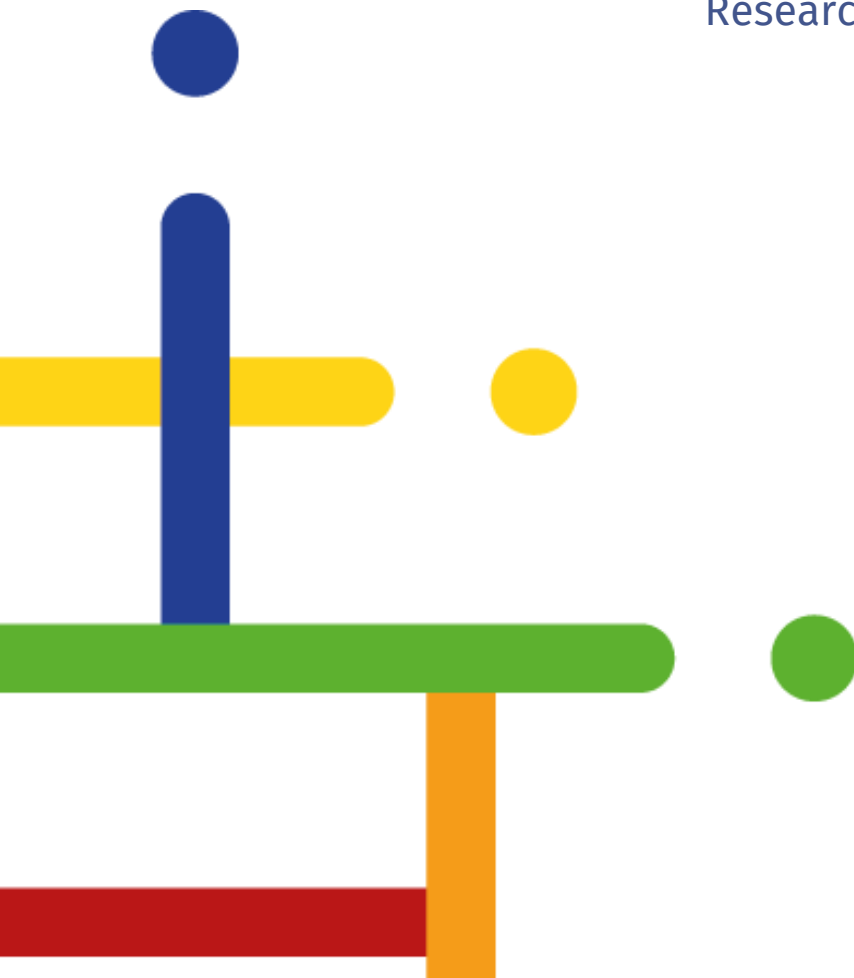**INFO – POW**

Assessment of the channels of information and their use in the posting of workers

INFORMATION CHANNELS MAPPING TOOL CROSS-NATIONAL DATASET

TECHNICAL REPORT

Sonila Danaj, Elif Naz Kayran, and Nicolas Prinz
European Centre for Social Welfare Policy and Research

April 2023

Corresponding Author: Sonila Danaj [danaj@euro.centre.org]

For more information: https://www.euro.centre.org/projects/detail/4442

Please refer to this publication as follows:
Danaj, Sonila, Elif Naz Kayran, and Nicolas Prinz (2023), "Information Channels Mapping Tool Cross-national Dataset Technical Report", European Centre for Social Welfare Policy and Research, Vienna, April 2023.

Contents

1 Introduction

The "Information Channels Mapping Tool Cross-national Dataset" is an output of the "INFO-POW - Assessment of the channels of information and their use in the posting of workers" project, which has received funding by the European Commission, DG Employment, European Social Fund+ (ESF+).[1] INFO-POW is a joint research project that brings together research institutions from five EU Member States (Austria, Belgium, Italy, Slovakia, and Slovenia) as well as social partners at both national and EU levels. The overarching aim of the project is to identify and assess the emerging and existing challenges and needs of companies active in the posting of workers (specifically in the construction sector) when it comes to accessing and using relevant information regarding the process of posting workers and the companies´ obligations as a result thereof. The project aims to promote the evidence basis on the topic through the collection and evaluation of original data specific to the posting process and posted workers' working conditions.

The dataset presented here is created as one of the outputs of the INFO-POW project and gathers data on existing sources of information targeted for informing companies active in posting in the 5 project countries. The main goal of this mapping exercise is to provide the first systematic identification of existing channels of information and to map the different dimensions and characteristics of the currently available information, online and offline.

Posting of workers in the EU is regulated by a series of EU Directives: the Directive 96/71/EC on posting of workers in the framework of the provision of services, which was amended by Directive 2018/957/EC, as well as the Directive 2014/67/EU on the enforcement of Directive 96/71/EC. Posting is also regulated under Regulation (EC) No 883/2004 on the coordination of social security systems and its Implementing Regulation (EC) No 987/2009. Posting and user undertakings must comply with these EU regulations as well as national legislation that transposes and/or complements the EU legislation, so access to information on rules and obligations is paramount.

In the frame of posting, it is the Enforcement Directive that stipulates in its articles EU Member States' obligation in improving access to information about posting. Specifically, Article 5 (§§ a - d) of the Enforcement Directive requires EU Member States to provide information on the posting of workers **free of charge**, in a **user-friendly format**, and in **accessible languages**. Article 5 further requires the **establishment of national platforms on a single website** on the posting of workers and **making information available through various channels**, which should be hyperlinked to facilitate navigation. Article 5 also requires Member States to indicate a contact person at the national liaison office in charge of dealing with requests for information (paragraph e).

Since the coming into force of the Enforcement Directive in 2014, access to information about posting has already been previously assessed by the European Commission (2019), Eurofound (2020), and various researchers (Cillo, 2021; Čaněk et al., 2018; Cukut Krilić et al., 2020; Danaj and Zólyomi, 2018; Danaj et al., 2021; De Wispelaere et al., 2021; Jorens and De

---

Wispelaere 2019; Kováčová et al.,2021; Zólyomi and Danaj 2019). These studies have found that despite the existence of **information provided through different channels**, **either by state or non-state actors**, there remains considerable room for improvement in terms of the channels of information provided and awareness of such resources. Earlier assessments have also looked at the **content** and **the way the information has been presented**. They find that although (single national) posting websites have been established throughout the EU, there exist considerable gaps in the legislation in many Member States on the **criteria for the information** these websites should contain.

Another finding is that the **format** in which content of the information presented is too diverse in too many critical aspects to attain the legally defined objectives of the Directive. The **quality of information** on national websites varies from mere extracts of national and EU legislation to more interactive or accessible content. Moreover, most information is provided in the Member States' national language(s). Although most national websites on posting may also have an **English version** and some provide **information in even more languages,** the criteria for the selection of languages are not transparent and often lack justification. As a result, earlier studies have concluded that the information provided on the posting of workers is insufficient and/or difficult to access for the stakeholders for whom it should be provided for.

While previous studies have identified such gaps in the existing information channels for posting in different dimensions of accessibility, languages, format, content, and scope, to date, there have not been a systematic account which maps such available informational content. The "Information Channels Mapping Tool Dataset" aims at addressing this gap by putting forward a generalizable and valid methodology of case selection, data collection, coding, and measurement to describe the current state of the available information on posting. The project team carried out the data collection and coding tasks for the mapping, relying on project partners' considerable expertise in research in their national cases and posting and language ability. In this respect, "Information Channels Mapping Tool Dataset" sheds new light on the currently available information provided by state and non-state actors on posting rules and obligations.

2 Methodology

For mapping the information channels in the 5 project countries, the first step of the research design was the establishment of the "information channel" cases that will be sampled for the mapping tool. To do so, **rules of inclusion and exclusion** were determined by two key theoretical definitions of the terms. First is the definition of what constitutes "information" in the context of posting of workers. Based on previous studies and following the dimensions highlighted in the EU Directives, we use the following definition for **information** on the posting of workers: *content on rules, rights, obligations, entitlements, procedures, sanctions, redress (complain and/or appeal), and institutions related to the posting of workers presented in descriptive, instructive, and/or otherwise guiding format*. Policy areas which this information might cover include employment relations, labour mobility, migration, company law, temporary agency work, taxation, social security, occupational safety and health, collective bargaining, holiday, and severance pay, monitoring and enforcement, subcontracting and liability, and health insurance. Second is the definition of what constitutes a **channel of information**. In this respect, we use the following definition for channels of information: *online and offline means of distributing content on rules, rights, obligations, entitlements, procedures, sanctions, redress, and institutions related to the posting of workers*.

We follow the implications of our theoretical definitions above when choosing to include or exclude a material as a case in our sample. Table 1 below summarizes the types of means that are included or excluded following the case selection criteria we apply. Our approach to mapping considers both online and offline information channels provided by state (the national and EU posting websites; institutional websites) and non-state actors (social partners, NGOs, consultancies) in each of the five countries. It covers all sectors of activity in order not to miss relevant channels of information. The list of channels is then narrowed down to construction to trace any sector-specific channels. Overall, based on these considerations, below we outline our inclusion and exclusion criteria for available information material on posting:

Inclusion criteria:

- *Governance level*: national, regional, local. EU channels should be included only if they have country specific information for your case study.
- *Audience*: Targeting posting undertakings/user undertakings, at least partially.
- *Content*: provide information on one or more content elements: rules, rights, obligations, entitlements, procedures, sanctions, redress (complain and/or appeal), and institutions relating to the posting of workers.
- *Policy area*: cover one or more related policy areas: employment relations, labour mobility, migration, company law, temporary agency work, taxation, social security, occupational safety and health, collective bargaining, holiday, and severance pay, monitoring and enforcement, subcontracting and liability, health insurance.
- *Style*: the information is provided in a descriptive, instructive and/or otherwise guiding format.
- *Online*: websites, events, training, flyers, brochures, manuals, guidelines, videos, infographics, podcasts
- *Offline*: offices, contact persons, events, training, flyers, brochures, manuals, guidelines, leaflets.

- *Period*: for published materials, events, and trainings focus on the latest available on the identified stakeholders' websites. If the list is comprehensive, stop at 5 years, i.e., from 2018 to-date.

Exclusion criteria:

- Items expressing individual views or opinions on topics related to posting.
- Elaborated content with an academic perspective from both a theoretical and empirical perspective.
- Online and offline news sources.
- Offline material that is out of print.
- Social media per se.

Table 1: Types of included and excluded information channels

Included		Excluded	
Online	**Offline**	**Online**	**Offline**
EU institutions´ websites that have specific information for your own country case study	Institutional offices with visiting hours	Academic publications	Out of print brochures, fliers, manuals that cannot be found online
EU social partners´ websites that have specific information for your own country case study	National social partner offices with visiting hours	Overall project pages and project outputs that are not listed in the online and offline items	
National posting websites	Information focal points/offices accessible to the target audiences		Newspaper articles
National institutions´ websites: ministries, monitoring and enforcement agencies and sector specific agencies	Manuals	Personal blogs	Events with a different thematic focus where posting is mentioned briefly
National social partner websites at the confederation and sectoral (construction) levels	Brochures/fliers		
Regional, local institutions websites	Offline informative events: workshops, seminars, info-days		
Private services websites: accounting, legal, or broader scope consultancies	Offline trainings		
Other designated posting pages			
NGO websites			
Online informative events: workshops, seminars, info-days			
Online brochures or manuals			
Online trainings			
Audio-visual content: videos, audio podcasts, posters, infographics			

2.1 Mapping themes, indicators, and measurement

Based on the literature and the specifications for access to information prescribed in the Enforcement Directive (Article 5), we identify the following five key themes as the focus of the mapping of the channels:

- **Information provider**: the type and characteristics of the entity providing the information that is responsible for the channel,
- **Availability**: refers to the format and type in which the information is provided (e.g., online, or offline),
- **Target groups**: at whom the information provided is targeted (e.g., only at undertakings posting to the country or also those posting from the country),
- **Accessibility and quality**: whether information is provided in an easily accessible format which is clear and understandable to numerous audiences,
- **Scope and content**: whether the information provided addresses the target audience's information needs and concerns related to the posting of workers, particularly from the perspective of user or posting undertakings.

To measure how these five themes are represented in each information channel included in the national case samples, we have created multiple indicators, which capture each theme's different dimensions. The indicators for the measurement of the themes are selected based on previous studies and the Directive 2014/67/EU of the European Parliament and of the Council of 15 May 2014 on the enforcement of Directive 96/71/EC concerning the posting of workers in the framework of the provision of services and amending Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation'). Our empirical strategy was to target a balance between exhaustiveness of the dimensions and the feasibility of the indicators which lend themselves to be coded in a within and between country comparative design of the channels. The indicators are, thus, focusing on aspects of the information channels which are identifiable in a reliable manner across cross-country coders of the channels. Furthermore, this coding strategy has also been selected as it lends itself to describe the current situation across the cases systematically. Table 2 below presents the overview of the five themes and the indicators we have selected to measure these themes. Further details of the indicator categories are available in the codebook of the dataset (Kayran et al., 2023).

The first theme **information provider** concentrates on identifying who provides each specific channel of information and comparatively codes the type of actor providing the information, the funding type of the channel, whether the information providing actor is a state or non-state actor, and the type of funding.

The second theme **availability** concentrates first and foremost on identifying online and offline channels respectively. For online channels, the websites and URL links are collected. For both online and offline channels, the types of dissemination channel are coded as well as the institution/actor responsible for the channel. For offline channels, the distribution methods are also considered. For both online and offline channels, the date of appearance of the information channel is coded. Lastly, within the scope of measuring availability of information, we have taken into consideration whether the channel is open access to the public, to a specific group, or whether the information is behind a paywall.

The third theme **target groups** is used to identify the audience of the information channel. Here, the indicators identify whether the channel contains information relevant for user companies (receiving posted workers), posting companies (sending posted workers), and posted workers. We include posted workers as an audience since when a channel provides information on workers' rights, these rights are obligations for employers. Therefore, information on such rights are also included in the mapping exercise. In addition to these three different kinds of target groups, each group is also coded from the perspective of the country for which the mapping is done for, i.e., whether the target audience of posting companies concern posting to or posting from the case country. Using this binary of sending and receiving country, we aim to cover all potentially relevant aspects of information needs and target groups. The coding for the target group indicators discussed are not mutually exclusive and allows the coders to select more than one type of target audience as a single information channel may include material that is relevant to multiple groups.

We also code whether the information provided is targeted to posting in general or posting in the construction sector specifically (or both) as the construction sector is the primary focus of the INFO-POW project.

The fourth theme **accessibility and quality** relates to the extent to which the information provided in each channel is presented in a way that can be understood and used by the relevant target groups. In this regard, language is one of the most relevant aspects. In terms of accessibility, we code the number of languages (in addition to the national languages) in which the channel is available in and whether the information is available in English, as the widely used common language. Next, we provide an indicator for the types of mediums and tools the information uses to convey the material to the target audience. Here our intention is to provide data on the extent to which information channels go beyond providing legal texts and textual information.

In terms of quality, we have an indicator which informs on whether the translated versions of the information channels have roughly the same amount of material as the national languages. For instance, in some cases, webpages may be only partially translated in terms of the content that they contain. Next, we also report the recency of the channels via an indicator of the last update of the online channels. While not so recent updates to the online channels do not automatically mean that the information is out of date, the indicator allows us to track the update frequencies of the channels available. As mentioned by the Enforcement Directive, we have added two indicators for whether the online channel provides external links for additional information and whether the online channel has hyperlinks to national posting websites in other countries. We also code an item regarding the availability of social media outreach of the information channel and whether (and the extent to which) the channel clearly identifies the national contact point or the national liaison officer for posting.

The fifth theme **scope and content** is used to systematically code, in multiple binary indicators, whether key topics in posting are covered by the information channel. Since relevant information and the specifics vary greatly depending on whether companies are interested in posting to or posting from a particular country, we code these binary indicators from the perspective of the national case country. In this theme, we selected 11 pre-determined content areas (see the last column in Table 2 for the full list) for which the coders entered the data for

indicator. Since the information channels may contain material on topics beyond these pre-determined variables, we also allow the coders to enter the additional content areas in an open-ended "Other" variable qualitatively.

Related to the outcome categories of our indicator items, most indicators are categorical variables with pre-determined categories, whereas some are binary such as the target group, scope and content indicators, and the availability in English. To not lose information when the coders encounter an observation outside of these pre-determined options, the data leaves room for qualitative entry respective to each indicator for write-ins and notes from the coders.

Table 2: Key themes and indicators used for the information mapping exercise

Theme:	Information provider	Availability	Target groups	Accessibility & Quality	Scope & Content*
	Name of the information provider	Online vs. Offline	Posting companies to AND/OR from country	Language availability (other than national languages of country)	Working times and work hours
	Type of actor (State vs. non-state)	If online, type of institution responsible for the channel	User undertakings inside AND/OR outside of the country	Availability in English	Occupational health and safety
	Type of actor (the type of institution providing the information)	If online, type of online channel	Workers posted to AND/OR from the country	Information equivalency of between different versions	Minimum wages and collective agreements
	Funding type of the actor providing the information	If offline, type of institution responsible for the channel	Sector specific information or targeting broadly posting	Recency of the information/timeliness	Registration for social insurance and contributions
	Governance level of the institution providing the information	If offline, type of channel		Accessibility of the information presentation	Work permits
		If offline, distribution method of the channel		Connection to external resources and relevant links	Overtime and other additional wage supplements
		Cost of access to the information (both offline and online)		National contact point/person availability	Leave and holidays
				Links to external foreign national posting websites	Facilitating information targeted at companies
				Social media accounts	Sanctions and enforcement in case of non-compliance
					Redress, appeal, and compensation

Note: *Each of these content items are coded both regarding whether they inform "posting to" and "posting from" country. Researchers also have the option to include additional content items that are not covered by the indicators here.

2.2 Coding strategy and validation

Each country case´s national coding for the mapping exercise has been undertaken by the project partner expert teams of the case. This allowed the coding to be done by researchers who are familiar with the posting context of the national case and those with language skills of the cases. The mapping tool research design, themes, coding rules, and indicators have been designed by the coordinators of the research project in close cooperation with the national experts who have conducted the data collection, allowing a good understanding of the coding rules and sampling strategy across the cases.

The research teams utilized the single national posting websites and their prior experience with postings of workers to identify pertinent actors who provide information to posting undertakings/user undertakings while coding the information channels. Further, extensive web research was conducted to identify information channels from public and private actors. Each research team performed a pervasive scan of the web for relevant sources in their national language and in English, using the search term "posting of workers to/from the COUNTRY." The web research was supplemented with additional terms such as "information," "notification," "minimum wages," "working times," "safety," "social insurance," "user undertakings," "work permits," and "sanctions" in relation to postings.

Coding was done per each information channel and not by content. For instance, if one channel provides multiple forms of information on different topics, these were still coded as a single channel within the national sample. Information channels coming from the same source were only separated if they are distinct enough. For instance, two different trainings that are clearly distinct sources of information dissemination but are provided online by the same actor were coded as separate channels. The coders were given instructions which were discussed between the research design team and the coders with ongoing feedback loops for clarification wherever decisions were unclear for coding categories. Such hesitations of coding were dealt with by the research design team and were then applied across all the national teams. By and large, the criteria for coding categories of target audience and content and scope themes' indicators were agreed to be kept as broad as possible and the cases were coded as positive cases, if at least one or more relevant information related to the target group, or the content, was available in the channel.

If the indicators did not apply for a particular channel, the item for that specific channel was coded as N/A (not applicable). The coding of indicators was left blank if the information channel is behind a paywall and the coding of the indicator cannot be done in a valid and reliable manner.

National country mapping tools and the indicators for measuring different dimensions of the information channels were checked for validity also through national stakeholders working in the field of the posting of workers, including public authorities and social partners' representatives in each case country, in a transnational online workshop organized as part of the INFO-POW project.

2.2.1 Ensuring cross-nationally comparative coding

To ensure the cross-national comparativeness of the coding, the research design team has reviewed the coding of the national mapping with two interim coding checks. The research design team has also checked the face validity of the coded indicators to ensure inter-coder reliability, and revisions of disagreement areas were discussed with the country experts, finding a solution that suited both the national context and comparability.

2.2.2 Limitations

One limitation of the mapping dataset is the difficulty in accessing and finding offline sources of information which may be disseminated in the field. To the best of the expert teams' ability, via desk research, most of the information channels mapped are coming from online sources. While there is a clear bias in the sample in favour of online channels, we argue that this constitutes a less important limitation when it comes to our research focus of companies' access to information. It is more common for unions or NGOs to reach out to workers on the work locations or sites and provide information offline. It is arguably less common for companies to receive information in this way.

Particularly in the cases of coding positive and negative cases of the presence or absence of a particular content area in an information channel, harmonization of the rules of coding across countries has been a challenging aspect of the data collection. Coding for the content availability across channels for the fifth theme has been set to the criteria of coding positively, using a minimum baseline. This was done to ensure comparability across the country cases. However, this means that there is indeed variation in the extent to which an area is covered by the channel. For instance, while one channel only gives minimal information on the work hours another channel might outline full details in a more comprehensive manner. The data collected here, thus, does not cover such variation in its indicators of the fifth theme. While the information channel's characteristics of accessibility and tools for dissemination are coded in other indicators, content specific characteristics of each indicator of content and scope do not reflect variation but rather a more basic presence/absence of information. This could be a potential area of improvement in conducting data collection more targeted to evaluate different content areas, allowing for additional indicator development, addressing such variation specifically.

Another limitation of the mapping is the material that is behind paywall in information channels that are not provided publicly. The data collection effort did not foresee payment of such fees to be able to gain access to what is available. Therefore, even though the mapping data identifies these channels and codes the indicators wherever possible, particularly the content and scope, as well as the accessibility and quality themes have been a limitation of the data wherever such information channels were included in the sample.

3 Description of the Dataset

3.1 Sample overview: information providers and availability

This section presents a comprehensive overview of the sample of the cross-national information channels mapping dataset. The sample includes a total of 182 information channels, distributed across five countries (Austria, Belgium, Italy, Slovenia, and Slovakia). Specifically, the dataset comprises 36 channels in Austria, 21 channels in Belgium, 38 channels in Italy, 36 channels in Slovenia, and 41 channels in Slovakia. A significant share of the sampled channels are online sources, exceeding 90% of the sample, while offline sources constitute a modest proportion. Figure 1 presents a detailed breakdown of the distribution of offline and online sources by each country case.

Figure 1: Number of channels in the dataset by availability, by country
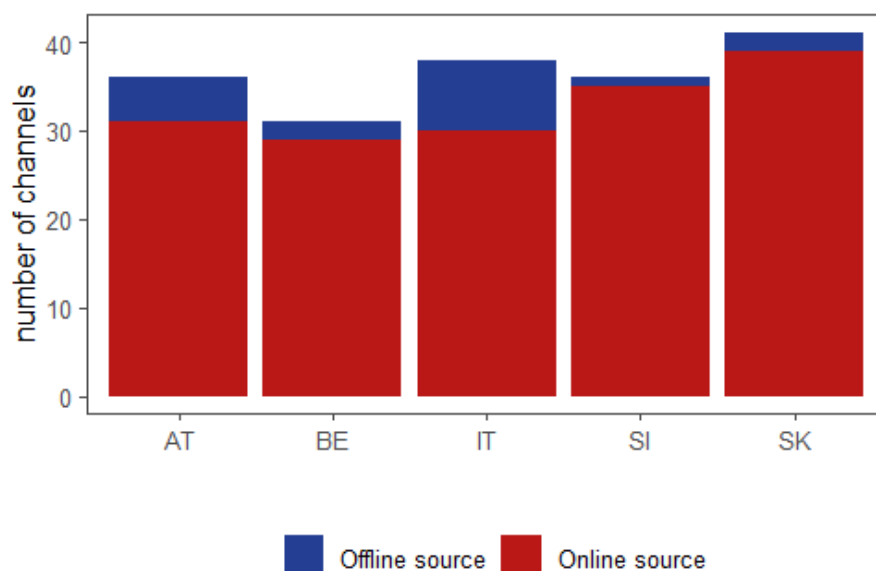
Source: Information Channels Mapping Tool Cross-national Dataset, Authors' own elaborations.

Figure 2 demonstrates the distribution of the number of information channels by the actors who are providing these resources in each country. Figure 2 exhibits a significant heterogeneity between countries. The figure shows that consultancies are the most common actor of information provision across several countries, especially in Slovakia. This is followed by the ministries, social partners from the employer and union sides, as well as labour inspectorates, which seem to be key actors in the provision of information. Finally, a plethora of other actors contribute to the provision of information on posting. Other actors identified in the mapping encompass non-governmental organizations, European Union institutions, social insurance establishments, as well as publishing houses.

Figure 2: Number of information channels by actors providing the source, by country
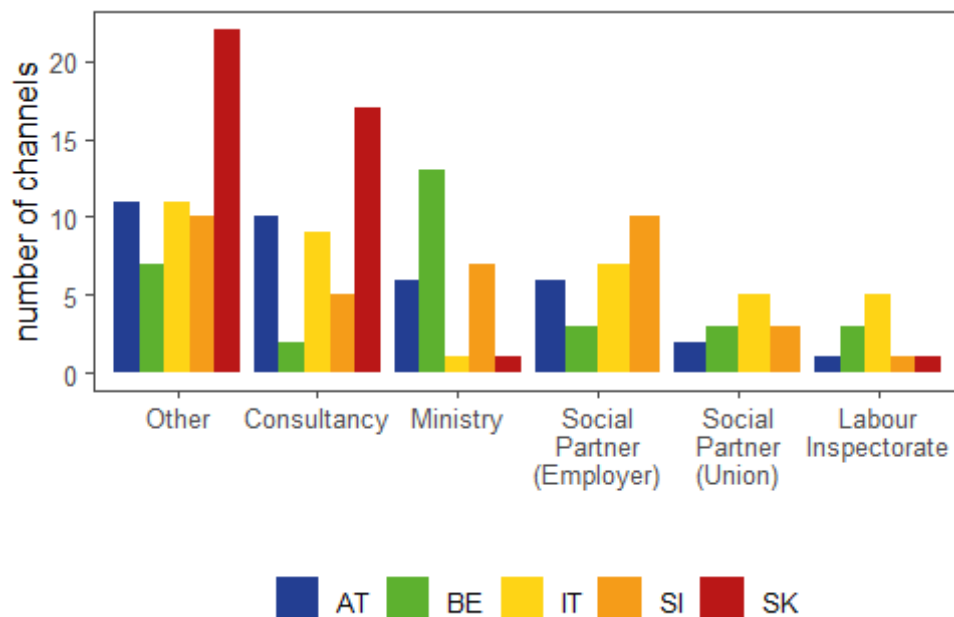
Source: Information Channels Mapping Tool Cross-national Dataset, Authors' own elaborations.

In terms of the governance level of the actor providing the information channel, over 85 % of the information channels are active at a national governance level (across the five countries in our sample). Additionally, 7 % of the channels operate at the EU level, while below 4 % operate on a regional governance level. As for funding, most of the information channels (around 36 %) in the dataset are publicly funded. Information channels privately funded for profit account for around 30 % of the channels of our dataset. Further 30 % of the sources receive other than public funding (not for profit). Upon closer examination of funding types across various countries, significant disparities are observed (see Figure 3). In Belgium and Slovenia, more than half of the sources receive public funding, while for Austria, Italy, and Slovakia, less than a third of the sources receive public funding.

Figure 3: Funding types of information channels, by country
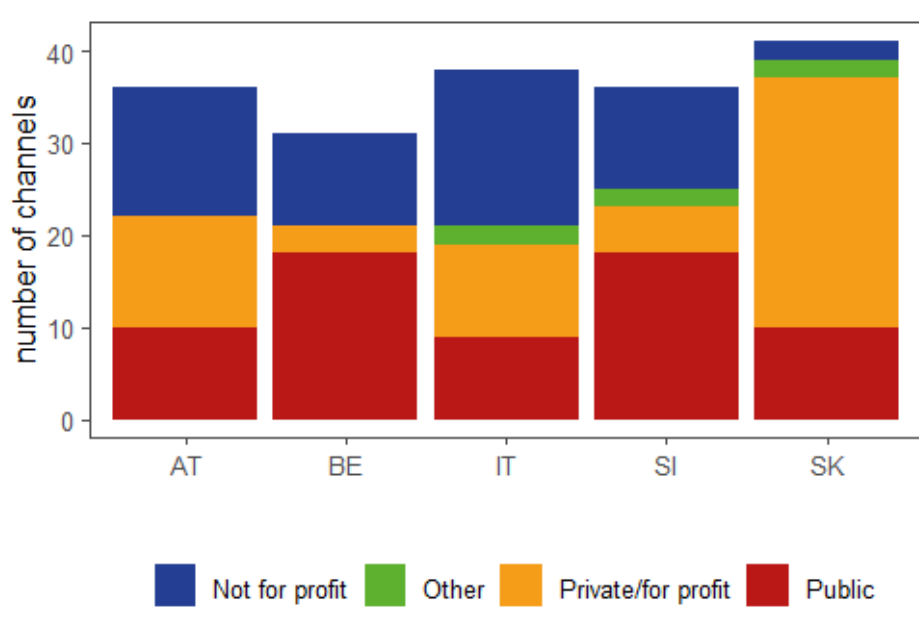
Source: Information Channels Mapping Tool Cross-national Dataset, Authors' own elaborations.

## 3.2 Target audience of the mapped information channels

The target audience of information channels is an essential aspect to consider when analysing the dissemination of information related to posting companies and posted workers. 88% of the mapped channels in the dataset contain information relevant to posting undertakings. Additionally, 46% of the channels are aimed at user undertakings and 36% provide useful information for posted workers. We note here that the mapping dataset was targeted to collect data on information channels for companies. In this respect, our dataset and sample should not be taken as exhaustive, particularly when it comes to the information which may be targeted entirely to posted workers. This may be especially true for offline channels. When using or interpreting the dataset, this should be an important consideration.

Figure 4 provides a more detailed understanding of the distribution of information channels targeting different groups in the dataset. The figure displays the absolute numbers (country) of the information channels that provide information to various target groups by country. Furthermore, the figure depicts the distribution of channels providing information on posting to the country, posting from the country, and both.

Most information channels in the dataset have information that is relevant for posting undertakings, followed by user undertakings, and posted workers (see our note above). Figure 4 shows that information channels that target posting companies primarily provide information on posting to the country in Austria, Belgium, and Italy. Conversely, for Slovenia and Slovakia, most sources targeted at posting companies cover posting from the country. Most information

sources aimed at user undertakings typically provide information on domestic (in-country) postings.

Figure 4: Target audience across information channels, by country
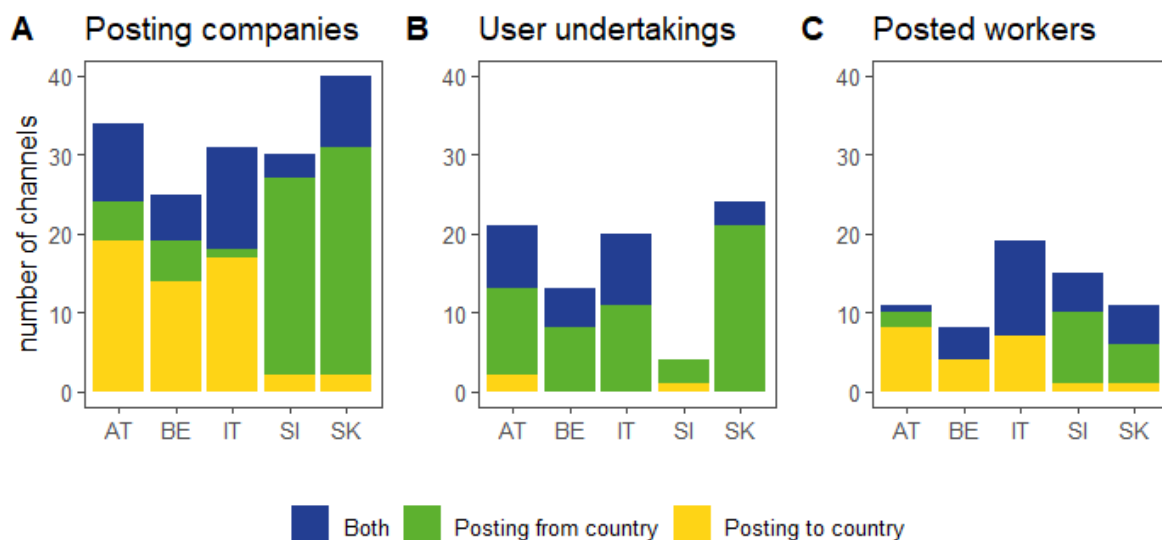
Source: Information Channels Mapping Tool Cross-national Dataset, Authors' own elaborations.

Examining information channels related to posting in the construction sector across the five countries, we found that 73% of the channels only provide general posting information, while 14% exclusively cover specific posting information in this sector. Additionally, 13% of the sources cover both types of information. If we take a closer look at individual countries, we see that 30% of the information channels in Austria provide specific information on posting in the construction sector. Meanwhile, 45% of the channels in Belgium, 35% of the channels in Italy, and 14% of the channels in both Slovenia and Slovakia also provide construction sector specific information.

3.3 Language characteristics of the mapped information channels

We identified language as one of the key indicators for measuring the accessibility of information channels. In the cross-national mapping dataset, we coded each channel based on the languages that they are available in. More specifically, for each information channel, we code the number of languages in which the channel is available in (this is in addition to the original national language versions of the channel). Figure 5 below demonstrates the percentage of channels where only the national language(s) were available in each country and the share of the number of additional languages. In Figure 5, 0 means that the information channel is only available in the national language(s) such as German in Austria or French, Flemish, and German in Belgium. Looking at Figure 5, we see that, in our data, at least more

than about 50% of the channels mapped in each country were not translated to a foreign language. The proportion of channels where only the national language is available is the highest in Italy. Belgium and Austria seem to have the highest proportions of at least one additional language for which the information channel was available.

Figure 5: Foreign language availability in information channels, by country
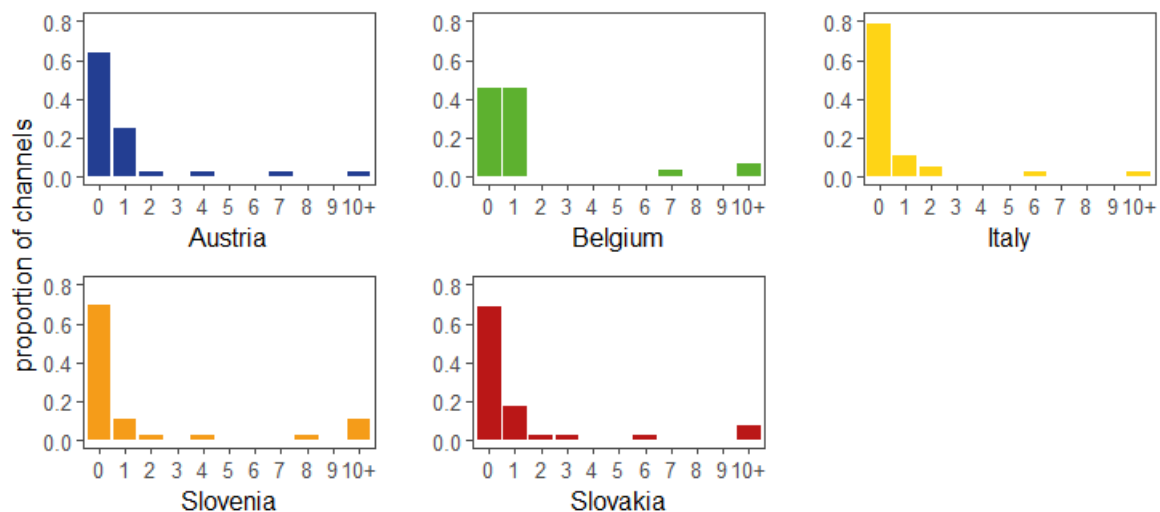
Source: Information Channels Mapping Tool Cross-national Dataset, Authors' own elaborations.

Next, our dataset also includes a variable on the extent to which an English translation of the channel is available. Considering the international nature of the posting activities, availability in English provides advantages of reach and accessibility for the users. Figure 6 demonstrates that about 60% of the channels in Belgium, about 40% channels in Austria, about 30% of channels in Slovenia and Slovakia, and around 20% of channels in Italy provide an English translation of the material available.

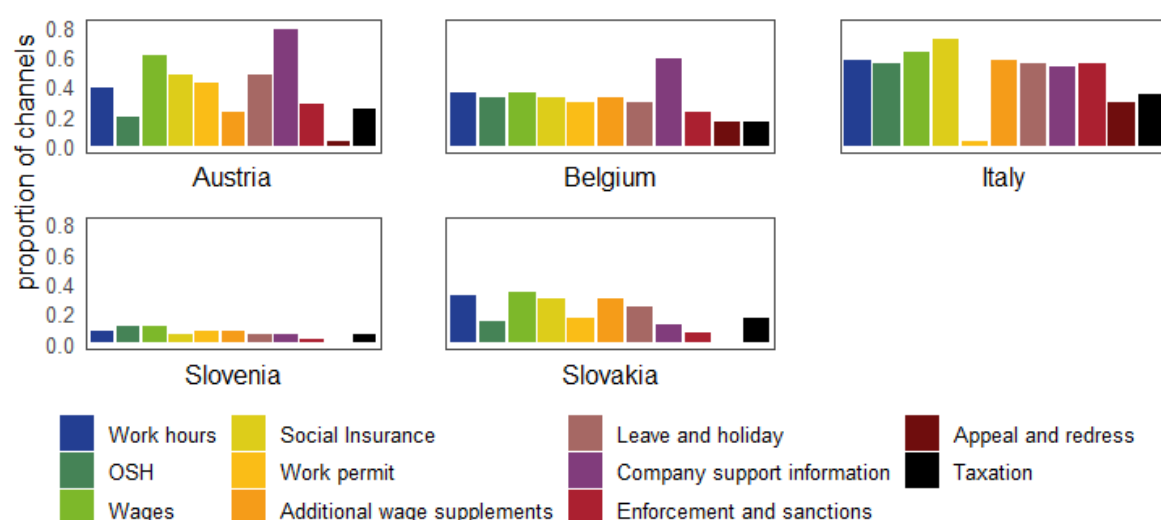**Figure 6: Availability of English translation in information channels, by country**
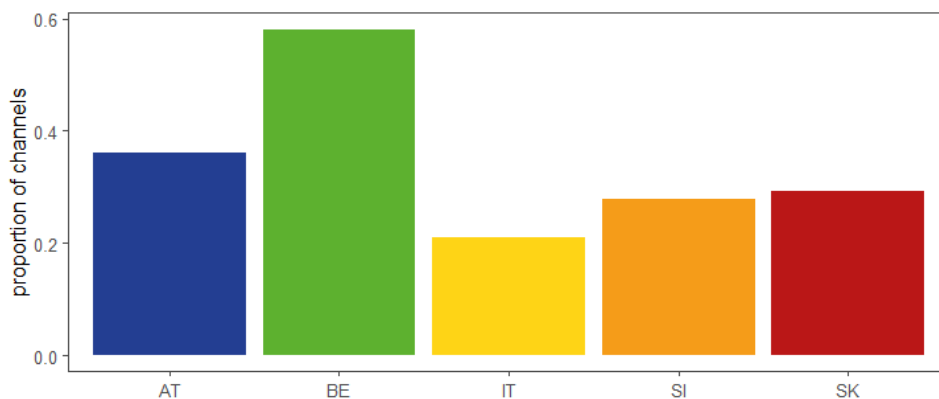
Source: Information Channels Mapping Tool Cross-national Data Manual, Authors' own elaborations.

3.4 Content and scope coverage of information channels

When it comes to content and scope, we have coded the channels using the eleven pre-determined categories we have selected as our measurement of this theme. As discussed in the measurement section, we use a differentiation of the content based on whether it concerns "posting to" or "posting from" the case country that is being mapped. Our coding of these variables in the dataset are binary. With this strategy, the dataset allows the users to easily get a picture of the proportion of coverage each topic gets in each national context comparatively. To illustrate this, Figure 7 presents the proportion of channels in which each of the eleven content areas were covered in the context of posting to each case country.

Looking at Figure 7, we see that, in our data sample, topics concerning "posting to" were more widely covered in the information channels in Austria, Belgium, and Italy when compared to the information channels in the dataset for Slovakia and Slovenia. This is unsurprising and demonstrates that our dataset reflects the practical reality on the ground of Austria and Belgium being predominantly countries and Slovakia and Slovenia being sending countries, and Italy as a mixed case. There is some variation in the topics covered in proportion, but it seems evenly distributed across the sample – except for some topics which are proportionately less covered. Nevertheless, when observing differences across topics, there is a similar picture across countries where content related to redress and appeal, taxation, and work permits when posting to these countries are the least covered content areas. Conversely, relevant information for facilitating doing business in the case countries and information on wages and social insurance topics when posting to these countries seem to be the most widely covered topics.
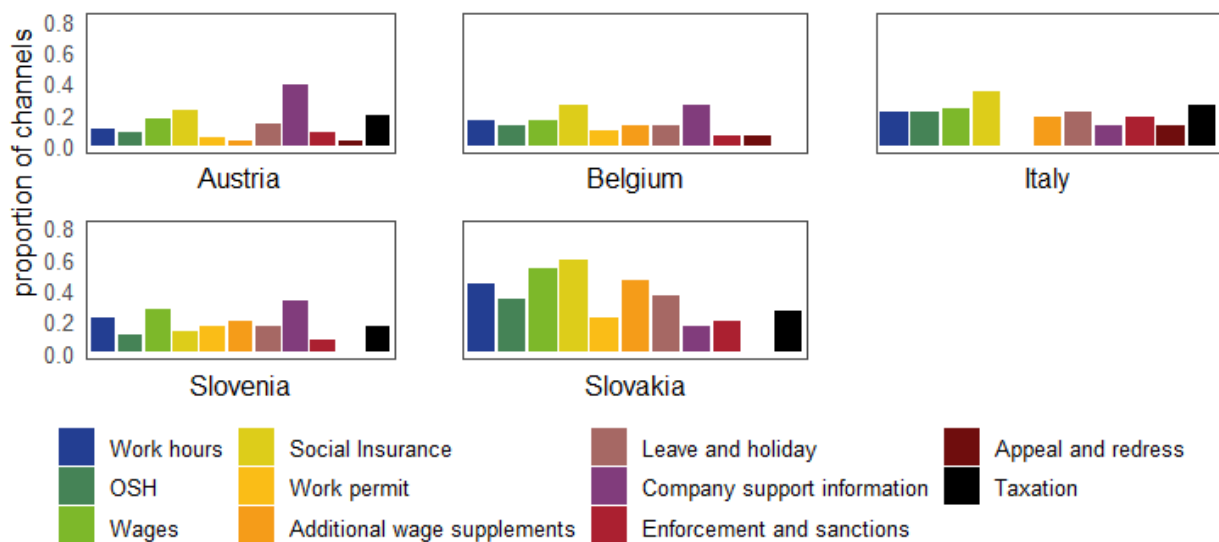
Figure 7: Content coverage in information channels when posting to [COUNTRY]

Source: Information Channels Mapping Tool Cross-national Data Manual, Authors' own elaborations.

In Figure 8, below, we present the same information on the proportion of the coverage of different topics in the information channels related to when posting from these case countries. For instance, here, the information channels are coded as positive cases of "work hours" regulations if they provide information about the different situation across countries (other than the case country). Here we observe the opposite picture to Figure 7, where the information channels from Austria, Belgium, and Italy scarcely cover issues of "posting from…", whereas this is widely covered in information channels from Slovakia and Slovenia. Key issues relevant to posting companies when posting from a country, such as wages, social insurance, and leave and holiday, seem to be among those that are the most covered – especially in the case of Slovakia, followed by Slovenia and Italy. Redress and appeal issues such as sanctions and enforcement seem to be under covered when looking at both Figure 7 and Figure 8.

Figure 8: Content coverage in information channels when posting from [COUNTRY]

Source: Information Channels Mapping Tool Cross-national Data Manual, Authors' own elaborations.

4 Dataset Value and Extensions

In this technical report, we detailed our research design and methodology for constructing a cross-national dataset of available information channels for posting companies. In this respect, the dataset is the first in bringing systematic evidence to the assessment of the existing channels of information in the field of posting of workers. More broadly, such a research design approach for mapping information could be applied in future research and policy-oriented reviews, to cover different migration and mobility topics in the fields of intra or extra EU mobility, targeting employers.

Substantively, present approach to the mapping of information channels here facilitates the description of the evidence base focusing on identifying strengths, weaknesses, and key gaps in information availability, as well as potential for improvement in each country. The data and the approach we present here is useful to **researchers** and can be easily applied by **public institutions**, **social partners**, and **other stakeholders** alike. The dataset allows users to measure and visualize areas in which information is lacking for potential future improvement. Importantly, the five themes could be analysed in bivariate or multivariate tabulations to get a more comprehensive account of, for instance, the comparison of the contents provided by different actors providing information or to see which tools and mediums of information dissemination are used by which actors to target which groups. Apart from the in-depth analysis of the different dimensions of access and use of information on posting across the different channels in every single country case, the dataset allows users, such as national policymakers, enforcement agencies and social partners, to compare channels across countries to identify and learn from good practices on the provision of information related to posting.

Empirically, the method we developed, as presented here, charts a fruitful research avenue for further expansion of the geographical scope of the present dataset from the five project cases to the wider EU-27 Member States. A mapping, covering the EU widely, would be useful not only to researchers for a more comprehensive study of this policy measure, but it would also benefit national stakeholders in other Member States to assess their own channels of information. The upscaling of the method and the extension of the dataset could also be useful to **EU level institutions and social partners**, who can use the dataset as a monitoring tool for the implementation and enforcement of the posting of workers regulatory framework regarding the provision of information, as well as any efforts towards convergence of practices across the European Union.

Moreover, concerning the field of information provision in the context of public policy, our method also adds to the broader field of public administration, public policy, and enforcement by developing and applying several key measurement indicators in a large-N design. Importantly, the methodology developed here allows for various dimensions of the information channels to be comparatively analysed using multiple indicators of assessment focusing on the five themes identified by the researchers. Both themes and indicators could also be further developed and adjusted in line with policy areas under scrutiny.

5 Research Design Team and Country Case Data Coders

Information Channels Mapping Tool Design	Elif Naz Kayran (European Centre for Social Welfare Policy and Research)
INFO-POW Research Design Coordination Team	Sonila Danaj (European Centre for Social Welfare Policy and Research) Elif Naz Kayran (European Centre for Social Welfare Policy and Research) Eszter Zolyomi (European Centre for Social Welfare Policy and Research)
Country Case Data Coders	
Austria	Nicolas Prinz (European Centre for Social Welfare Policy and Research)
Belgium	Lynn De Smedt (HIVA KU Leuven) Frederic De Wispelaere (HIVA KU Leuven)
Italy	Rossana Cillo (Ca' Foscari University of Venice) Fabio Perocco (Ca' Foscari University of Venice)
Slovakia	Lucia Kovacova (Slovak Academy of Sciences) Alexandra Moran (Slovak Academy of Sciences)
Slovenia	Mojca Vah Jevsni (ZRC SAZU- Slovenian Migration Institute) Kristina Toplak (ZRC SAZU- Slovenian Migration Institute)

6 Data Availability and Citing the Data

The Information Channels Mapping Tool Cross-national Data introduced and described in the current report is publicly available at AUSSDA - The Austrian Social Science Data Archive online repository. The data is published under open access (OA). When using or referring to the data, please cite this technical report and the dataset:

Dataset: Kayran, Elif Naz, Sonila Danaj, Eszter Zolyomi, Rossana Cillo, Lynn De Smedt, Frederic De Wispelaere, Lucia Kovacova, Alexandra Moran, Fabio Perocco, Nicolas Prinz, Kristina Toplak, Mojca Vah Jevsnik (2023). INFO-POW: Information Channels Cross-national Mapping Tool Dataset. Vienna: AUSSDA.
https://doi.org/10.11587/HS6WHC

Technical Report: Danaj, Sonila, Elif Naz Kayran, and Nicolas Prinz (2023), "Information Channels Mapping Tool Cross national Dataset Technical Report", European Centre for Social Welfare Policy and Research, Vienna, April 2023.

7 References

Čaněk, M., Kall, K., Lillie, N., Wallace, A., & Haidinger, B. (2018). Transnational Cooperation among Labour Regulation Enforcement Agencies in Europe: Challenges and Opportunities Related to the Posting of Workers. Brussels: Solidar.

Cillo, R. (2021). Bridging the gap between legislation and practice in the posting of workers: Italy Country Report. Ca' Foscari University of Venice.

Cukut Krilić, S. K. Toplak & M. Vah Jevšnik (2020). Posting of Third Country Nationals: A comparative study. Ljubljana: ZRC SAZU. Available at https://www.euro.centre.org/publications/detail/3929

Danaj, S. and Zólyomi, E. (2018). Occupational Health and Safety of Posted Workers in the EU: A Comparative Report. POOSH – Occupational Safety and Health of Posted Workers: Depicting the existing and future challenges in assuring decent working conditions and wellbeing of workers in hazardous sectors. Vienna: European Centre for Social Welfare Policy and Research. Available at https://www.euro.centre.org/publications/detail/3354

Danaj, S., Kahlert, R., Zólyomi, E., Prinz, N. & Sandu, V. (2021). The gap between legal procedures and practices in posting rule enactment: a comparative working paper. Vienna: European Centre. Available at: https://www.euro.centre.org/projects/detail/3633

De Wispelaere, F., Schepers, W., Jorens, Y., Nerinckx, E., Rocca, M. & L. Duchateau (2021). Cross-border Employment in the Live Performance Sector. Exploring the social security and employment status of highly mobile workers. Leuven: KU Leuven. Available at https://hiva.kuleuven.be/nl/nieuws/docs/zkd8143-rapport-eind-web.pdf

Eurofound (2020). Improving the monitoring of posted workers in the EU, Dublin: Eurofound.

European Commission (2019). Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the application and implementation of Directive 2014/67/EU of the European Parliament and of the Council of 15 May 2014 on the enforcement of Directive 96/71/EC concerning the posting of workers in the framework of the provision of services and amending Regulation (EU) 1024/2012 on administrative co-operation through the Internal Market Information System ('the IMI Regulation'). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0067

Jorens, Y. and De Wispelaere, F. (2019), Intra-EU posting: looking for solutions: a Herculean or a Sisyphean task? BTSZ/RBSS, Vol. 61, No. 1, pp. 113-138.

Kayran, Elif Naz, Sonila Danaj, Eszter Zolyomi, Rossana Cillo, Lynn De Smedt, Frederic De Wispelaere, Lucia Kovacova, Alexandra Moran, Fabio Perocco, Nicolas Prinz, Kristina Toplak, Mojca Vah Jevsnik (2023). INFO-POW: Information Channels Cross-national Mapping Tool Data Codebook. Vienna: AUSSDA.

Kováčová, L., Studená, I., Kureková, L. M. (2021). Bridging the gap between legislation and practice in the posting of workers: Slovakia Country Report. Slovak Academy of Sciences.

Zólyomi, E. & Danaj, S. (2019) Language barriers and the occupational safety and health of posted workers, Policy Brief 2019/4. Vienna: European Centre. Available at https://www.euro.centre.org/publications/detail/3474.

COORDINATOR

European Centre for Social Welfare Policy and Research (Austria)

PARTNERS

HIVA – Research Institute for Work and Society, KU Leuven (Belgium)

UNIVE – Ca' Foscari University of Venice (Italy)

CSPV SAV – Centre of Social and Psychological Sciences, Slovak Academy of Sciences (Slovakia)

ZRC SAZU – Research Centre of the Slovenian Academy of Sciences and Arts (Slovenia)

ASSOCIATED PARTNERS:

EBC - The European Builders Confederation (Belgium) • FIEC - The European Construction Industry Federation (Belgium) • EFBWW - The European Federation of Building and Woodworkers (Belgium) • Bouwunie - The Union of the SME construction companies (Belgium) • Confindustria Vicenza - Italian Association of Enterprises (Italy) • SOPK - The Slovak Chamber of Commerce and Industry (Slovakia) • KOZ SR - The Confederation of Trade Unions of the Slovak Republic (Slovakia) • NLI SR - National Labour Inspectorate (Slovakia) • ESS - Employment Service of Slovenia (Slovenia)