COVINFORM

CORONAVIRUS VULNERABILITIES AND INFORMATION DYNAMICS RESEARCH AND MODELLING

D4.3 Analysis: Government responses to COVID-19 and impact assessment

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Executive Summary

This report focuses on describing and assessing government response to the COVID-19 pandemic. It contains findings from empirical research that is ongoing with government experts and stakeholders from COVINFORM target countries. These findings are supported by the analysis of EU and target countries' government responses, previously conducted and included in the COVINFORM baseline report *"D4.1 Baseline Report Governmental responses"*. In this way, this report updates the COVINFORM baseline report and informs future research in the project.

Specifically, the empirical research covered the following five dimensions of government responses:

- Pandemic planning and preparedness
- Governmental approaches to defining and addressing vulnerability
- Responses on multiple levels of governance
- Economic and social welfare responses
- Socio-political, legal, and ethical factors influencing government preparedness and response

To explore these dimensions, the report uses primary data collected through interviews with relevant experts and stakeholders in the target countries in the context of Work Package (WP) 4 *"Government responses and impact assessment"*. Secondary data, including those from previously published COVINFORM reports, complement and enrich these primary data.

The report is organized as follows. After an introductory chapter (Chapter 1), the report presents its methods for empirical research (Chapter 2) and provides main demographic information of the sample population of the empirical research (Chapter 3). Following, the report describes the previously mentioned dimensions of government response across five chapters, each one focusing on one dimension, as listed above. Chapter 4 focuses on government planning and preparedness. Chapter 5 focuses on governmental approaches to defining and addressing vulnerability. Chapter 6 focuses on COVID-19 responses on multiple levels of governance. Chapter 7 focuses on economic and social welfare responses to COVID-19. Chapter 8 focuses on socio-political, legal, and ethical factors influencing government preparedness and response. Each of these chapters includes:

- An introduction to the government response as applied in the EU and target countries, based on secondary data from literature review and previous COVINFORM reports
- An analysis of the government response as examined from the empirical research and related interviews
- A short summary of the findings that also include recommendations for the next interview rounds.

Finally, a summary and conclusions chapter (Chapter 9) is presented to summarize the main findings of the report and to provide recommendations for future activities in WP4 *"Government responses and impact assessment".* Furthermore, the findings will inform the wider COVINFORM project allowing the consortium to investigate underexplored issues and deepen understanding of important themes emerging from the empirical research.

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Acronyms & Abbreviations

Term	Description
CNCCI	National Centre for Management and Coordination of Intervention
ECDC	European Centre for Disease Prevention and Control
EODY	National Public Health Organization
ERTE	Temporary Workforce Reduction Program
EU	European Union
EVA	Empathic Visualisation Algorithm
FEAD	European Fund for Aid to the Most Deprived
FI	Frailty Index
GPs	General Practitioners
ILO	International Labour Organization
NEET	Neither in Employment or in Education or Training
NGEU	NextGenerationEU
NGOs	Non-Governmental Organizations
NHS	National Health System
PLM	Product Lifecycle Management
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plans
SME	Small and Medium-sized Enterprises
SURE	Unemployment Risks in an Emergency
SVI	Social Vulnerability Index
VCA	Vulnerability Capacity Assessment
WHO	World Health Organization
WP	Work Package

1 Introduction

The COVID-19 pandemic represented a challenge for all governments in the European Union (EU) and the target countries of the COVINFORM project. Therefore, this report aims at providing an initial descriptive analysis and assessment of specific dimensions of governmental responses and impacts in the EU and COVINFORM target countries.

These dimensions are as following:

- Pandemic planning and preparedness
- Governmental approaches to defining and addressing vulnerability
- COVID-19 responses on multiple levels of governance
- Economic and social welfare responses to COVID-19
- Socio-political, legal, and ethical factors influencing government preparedness and response

This report provides relevant findings that together with the baseline COVINFORM report *"D4.1: Baseline report: Governmental responses"* draw a deeper and clearer picture of how governments responded to some of the challenges posed by the COVID-19 pandemic. The findings of D4.3 will guide the empirical research for future activities in WP4. On the one side, they identify key issues that could be investigated further in the empirical research. On the other side, they help to refine the research questions and objectives for the second WP4 interview round, scheduled in M31 of the COVINFORM project (May 2023). Furthermore, D4.3 provides useful information to complement empirical research conducted in WP5, focusing on healthcare workers COVID-19 response, and WP6, focusing on community responses, and resident interviews.

This deliverable is structured as follows:

Chapter 2, led by KEMEA, reports the main qualitative research methods that were used in the empirical research. For the empirical research, semi-structured interviews were conducted with a wide range of governmental actors, public authorities, and policy makers between October 2021 and January 2022.

Chapter 3, led by TRI, provides a summary of the main sociodemographic details of 39 interviewees over a total sample population of 42 interviewees across the 10 target countries.

Chapter 4, led by AUTRC, focuses on government planning and preparedness to COVID-19. The chapter provides an overview of the government responses in each target country. The chapter describes how the government of each target country responded to the pandemic on the basis of pre-existing strategies and newly developed measures. To respond to the pandemic, each country established both a central authority and new bodies, task forces or working groups that often-included public health experts to provide consultancy for policy- and decision-making. Final decisions were taken under the responsibility of central governments, but often generated confusion among both the population and actors involved in pandemic management. The action of the established bodies or task forces has been mostly considered as positive in managing the pandemic. Experts in different fields supported governments in decision-making. In some cases, experts provided their knowledge to advise governments about decisions to be taken. In other cases, experts took leadership roles and were responsible for making decisions together with governments. However, the findings demonstrate that pre-existing crisis management plans in each target country were insufficient and proved ineffective in promptly responding to the pandemic.

Chapter 5, led by TRI, focuses on governmental approaches to defining and addressing vulnerability in the context of the COVID-19 pandemic. The chapter shows the overlaps and differences across target countries in identifying and defining vulnerabilities based on variables related to e.g., health, cultural, economic, and social factors. The categories that governments perceived as more vulnerable to COVID-19 were elderly people, people who did not speak the national language, migrants and asylum seekers, single-parent families, or workers in certain businesses. However, the definition of vulnerability changed across time. Approaches to vulnerability have been diversified, with some countries that mainly defined and targeted vulnerable groups by providing financial, psychological, or housing support, and other countries that did not employ a tailored approach. Vulnerability emerged as a condition that varies across individuals and groups based on their sociodemographic characteristics. Therefore, it is not a condition related to COVID-19, but to longstanding everyday challenges existing before the pandemic and exacerbated in these pandemic years. While positive experiences exist in terms of cooperation and collaboration between governments, institutions, and local communities, generally there has been limited trust by local communities and vulnerable groups towards governments in relation to the pandemic response.

Chapter 6, led by KEMEA and URJC, focuses on COVID-19 responses by multi-level governments. The chapter demonstrates that while some target countries have employed a more top-down centralized approach and structure, other countries have adopted a more decentralized structure that also includes bottom-up elements. In this way, it has been found that in the target countries, government agencies cooperated through horizontal intragovernmental relationships, e.g., ensuring cooperation between ministries and other agencies, organizations, and companies. In addition, in some cases there has also been enhanced cooperation between multiple government levels and civil organizations. The chapter also demonstrates, however, that different government levels and organizations had overlapping responsibilities, that undermined the effectiveness of actions and interventions.

Chapter 7, led by SAPIENZA, focuses on economic and social measures that each target country adopted to respond to the pandemic. In the chapter, findings have highlighted the different measures implemented in the EU and target countries to cope with the challenges posed by the COVID-19 pandemic on economic wellbeing of people and organizations. Target countries have established economic instruments to support and protect businesses, including funds for businesses and vulnerable groups as well as ad hoc funds for the pandemic recovery. In addition, target countries have also developed and implemented social welfare measures for vulnerable groups, including in particular support for families, benefits for unemployed people, and support to ensure labour market continuity. From the empirical research, however, there is limited evidence to support a cross-country comparison of these economic and social measures.

Chapter 8, led by TRI, focuses on socio-political, ethical, and legal factors influencing government preparedness and response in the target countries. In the chapter, findings revealed the ethical and legal challenges posed by the implementation of restrictive measures, the surveillance and contact tracing responses, and the COVID-19 alert and warning systems. Accordingly, these measures run the risk of creating discrimination between people (e.g., those who have or have not been vaccinated), or creating distrust among citizens, as well as restricting human (e.g., denying access to some places) and privacy rights (e.g., by enforcing surveillance through drones). These issues clearly emerge in the target countries, in particular by using contact tracing apps.

Chapter 9 summarizes the main findings and provides recommendations for future steps of the COVINFORM project.

The report provides important findings on the COVID-19 government response in target countries, including Austria, Belgium, Germany, Greece, Italy, Portugal, Romania, Spain, United Kingdom (UK) (England and Wales). Specifically, findings of the report identify challenges, opportunities, overlaps and differences of government responses, bringing attention on those data that have not been generated yet but that are required for a better understanding of COVID-19 response from both government and non-government actors. Therefore, the report will inform the direction of the empirical research of the COVINFORM project, including the resident interviews and the interviews with experts to be conducted in those countries where reaching the required numbers of interviews has been difficult.

2 Method

Empirical research in the context of WP4 draws up on the findings of the desktop research reported in the COVINFORM report *"D4.1: Baseline report: Governmental responses".* As the findings from the desktop research indicated, there was a need for a more in-depth examination on the reasons behind the adoption of a specific response in each target country during the different pandemic phases. There was also the need to investigate the way these responses have been received by people, and their consequences on the levels of trust towards governmental actors and policy makers.

The empirical research has been carried out in ten local sub-national research sites in partner countries, which are geographically defined. In these sites, all the empirical research of WP4-7 will be conducted. Criteria for the selection of the sub-national research in each partner country are site-appropriate quantitative and/or qualitative indicators of vulnerability in the context of the pandemic. The sub-national research sites have been chosen as per Table 1 below.

Table 1. Overview of the research sites included in the present report

Partner	Country	Sub-national site
SYNYO	Austria	Vienna
UANTWERPEN	Belgium	Antwerpen
KEMEA	Greece	Athens
SAPIENZA, UCSC	Italy	Rome
FS	Portugal	Évora
SNCRR	Romania	Babadag
URJC, SAMUR	Spain	Madrid
UGOT	Sweden	Gothenburg
TRI, MDI	England	Birmingham
SU	Wales	Swansea

Criteria for selection of each site have been reported in COVINFORM report *"D3.2: Multi-site research design and methodological framework"*. More specifically, the research focuses on the social, economic, health, mental and general impact governmental responses had in the research site for each target country. It also focuses on the way these responses have been adapted to certain needs, as well

as on the lessons learnt in terms of unintended consequences and promising practices in response to the COVID-19 pandemic.

As it has been already stated in the COVINFORM report *"D3.2: Multi-site research design and methodological framework"*, the overreaching questions of the empirical research of the project can be summarised as:

1. How did national and local COVID-19 responses impact human behaviour, social dynamics, economic wellbeing, and physical and mental health outcomes across diverse local contexts?
2. How were local responses to COVID-19 adapted and shaped by the local health, socioeconomic, political and community contexts?
3. Which policy failures, unintended consequences, trade-offs, and promising practices can be identified in COVID-19 responses across diverse local contexts?

Specifically related to WP4, the researchers posed more specific questions that can be summarised as the following four different areas of concern:

- Governance Systems
- Users
- Social, economic, and political settings
- Stakeholders Interactions

In relation to these areas of concern, the population of interest were governmental actors, public authorities, and policy makers (e.g., Ministries of Health, of Citizens Protection, and generally with decision making powers during the pandemic).,

The main qualitative methods that were used in the empirical research of WP4 were expert interviews. Expert interviews allow researchers to investigate a phenomenon based on an extensive amount of knowledge from people who have specific expertise and experience about an investigated phenomenon, in this case about specific procedures, decision making and interactions into governments to respond to the pandemic. Semi-structured interviews provide the interviewee with room for further discussion and storytelling about the investigated phenomenon. Therefore, semi-structured interviews are best suited to explore issues related to decision-making and actions of multi-level governmental actors. Finally, since the goal of the research was to delve deeper into the why's and how's related to the governmental responses to the COVID-19 pandemic, one cannot limit the questions to a questionnaire but rather opt for semi-structured discussions where other topics or subcategories of relevance might come up.

To get a better understanding of the governmental responses to COVID-19, the researchers interviewed a wide range of experts, including governmental actors, public authorities, and policy makers (for more specific details on the recruitment procedures and sample population please see Chapter 3). The COVINFORM report *"D4.2 Research Design: Governmental responses"* guided the empirical research process. This manual includes the research protocol including aims and objectives, guidelines for participant sampling and recruitment, the research methodology, and the interview guidance. Required research ethics forms such as information sheets and informed consents have been prepared by the consortium and available as Annexes to this deliverable. All the above-mentioned materials were provided in English and adapted according to the research contexts and needs. In particular, in case where the interviews have been conducted in a target country where English is not

the official language, researchers conducted the interview in the national language and then translated the findings into English by ensuring consistency with the original meaning.

The fieldwork for WP4 followed the general timeline of the joint empirical research and was officially initiated in mid-October 2021. The interviews were held between October 2021 and January 2022. All researchers sent their transcripts back to KEMEA, using a standardized 'findings template' for the analysis to occur. The analysis was undertaken in cooperation with TRI, who completed the final report. Interview transcripts have then been analysed according to clusters included into the "finding template" and aiming at covering the following aspects: Implementation of measures; Good practice/successes; Drawbacks, considerations and take away lessons; and Citizens' views and levels of trust about the government response before and after the pandemic. The most significant insights for each of these clusters were reported verbatim or paraphrased to ensure clarity in delivering the right message.

Finally, the research followed and respected the ethical framework of the project, as outlined in the confidential COVINFORM report *"D1.4 Ethical Framework, in strict compliance with the highest ethical principles and fundamental rights"* (M6 – April 2021). Forty interviewees participated in the empirical research. All their data have been anonymised.

Given the localised data collection in a specific research site in each target country, it is important to note that the empirical findings from each research site cannot be generalized to the whole target country. Notwithstanding this, this localised empirical research can provide useful information and insights for a better understanding of trends and patterns of government response to the pandemic, that can be used also to inform future COVINFORM work.

3 Sample population

Conducting the interviews during the pandemic was a challenging task for every partner of the consortium. Each research site in the target countries was required to have representatives from decision-making authorities, Ministries and Healthcare entities, responsible for shaping the COVID-19 response. Given their crucial role in combatting the ongoing pandemic, these professionals and decision makers were working extra hours and under time pressure. Therefore, approaching and requesting interviews from these target groups was quite challenging. In addition, some partners of the consortium were not able to conduct field research due to the increasing infection rate, long-working hours and multiple tasks and responsibilities of our target group, as in the case of Germany. Further, due to the need to respond to the new COVID-19 variant Omicron, new measures were adopted by multiple EU countries and resulted in the postponement and/or cancelation of pre-scheduled interviews of some partners. Additionally, the whole procedure of expert interviews, since it was intended to be a face-to-face activity, was also restricted due to COVID-19 safety protocols. Nevertheless, in this case, interviewees managed to adapt and conduct the interviews online respecting the safety measures communicated in each country when conducting the interviews on site. To summarise, the partners involved in the respective deliverable managed to adapt and mitigate the limitations and restrictions that occurred due to the pandemic at an efficient level in order to generate and provide research findings.

Forty-two interviewees from the target countries participated in the empirical research, ranging from 2 interviewees in UK Wales and 5 interviewees in Belgium (see Table 2).

Table 2: Number of interviewees for each partner country.

Country	Austria	Belgium	Greece	Italy	Portugal	Romania	Spain	Sweden	UK Egland	UK Wales
Number of interviewes	4	5	5	4	5	4	5	5	3	2

However, socio-demographic details are available just for 39 out of 42 interviewees. To provide an overview of the interviewees, Table 3 reports their main sociodemographic characteristics. Eleven interviewees (28.9%) are between 40 and 50 years old, and other 11 interviewees (26.3%) are over 60 years old, followed 8 interviewees (21.1%) between 30 and 40 years old, 6 interviewees between 50 and 60 years old (15.4%), 2 interviewees between 20 and 30 years old (5.1%), and 1 interviewee with unknown age (2.6%). In terms of gender, there is a predominant male component. Indeed, thirty-one interviewees (78.9%) are male, while there are 8 female interviewees. Almost all the interviewees live in the country they been interviewed for. In terms of family composition, sixteen interviewees (41%) have children, while 11 interviewees (28.2%) do not have. However, we need to consider that 12 interviewees (30.8%) did not provide an answer to this question. Nineteen interviewees are married (48.7%), with other 10 interviewees (25.6%) falling into all the remaining categories (Living with partner, Never married, Divorced, Single, Widowed) in total. Also in this case, however, it has to be considered that 10 interviewees (25.6%) did not provide an answer. In terms of education, twenty-one interviewees (53.8%) have a master's degree, followed by 6 interviewees (15.4%) holding a doctorate or equivalent. Other five interviewees in total fall into the High school, Post secondary (non tertiary) and Bachelor degree or Civil Service exam, with 7 interviewees (17.9%) not providing an answer.

In terms of profession, the most represented category among the interviewees is that of Head/Director in health organizations at multiple government levels and including private organizations, with 22 interviewees (56.4%) mainly working for public health agencies and directorates at national level. These are followed by eight interviewees (20.5%) that are civil servants or analysts, and by three University Professors (7.7%). Interviewees were also asked about their vaccination status. 29 of them are fully vaccinated (74.4%), although 10 interviewees (25.6%) did not provide an answer. Finally, interviewees were asked if they have been tested positive to COVID-19. Four of them (10.3%) reported to have tested positive. However, there are also 19 interviewees (48.7%) who did not provide an answer to this question.

Table 3. Demographic information of sample population (n=39).

Country of the respondent*	Number of respondent (%)
Austria	2 (5.1)
Belgium	6 (15.4)
Greece	5 (12.8)
Italy	4 (10.3)
Portugal	4 (10.3)
Romania	4 (10.3)
Spain	5 (12.8)
Sweden	5 (12.8)
UK (England)	2 (5.1)

UK (Wales)	2 (5.1)
Age category, at time of interview	
20-30 (years)	2 (5.1)
30-40 (years)	8 (20.5)
40-50 (years)	11 (28.6)
50-60 (years)	6 (15.4)
>60 (years)	11 (28.2)
Unknown	1 (2.6)
Gender	
Male	31 (79.5)
Female	8 (20.5)
Has children	
Yes	16 (41)
No	11 (28.2)
Unknown	12 (30.8)
Marital Status	
Living with partner	3 (7.7)
Divorced	1 (2.6)
Married	19 (48.7)
Never married	2 (5.1)
Single	2 (5.1)
Widowed	2 (5.1)
Unknown	10 (25.6)
Highest level of education completed	
High school	1 (2.6)
Post-secondary (non tertiary)	1 (2.6)
Bachelor degree or Civil Service exam	3 (7.7)
Masters	21 (53.8)
Doctoral or equivalent	6 (15.4)
NA	7 (17.9)
What is/was the name or title of your main job?	
Head/Director (Civil Protection, Public Health, Government) **	22 (56.4)
Civil Servant, Advisor, Analyst	8 (20.5)
Councillor	2 (5.1)
University Professor	3 (7.7)
Unknown	4 (10.3)

COVID-19 vaccination status	
Fully vaccinated	29 (74.4)
Unknown	10 (25.6)
Previous COVID-19 infection	
Yes	4 (10.3)
I think so but I was not tested	1 (2.6)
No	15 (38.5)
Unknown	19 (48.7)

*All interviewees reside in their country of employment; **Civil Protection Department, Health Section of a National/Regional Government, Regional government.

4 Cross-country analysis of pandemic planning and preparedness

4.1 Cross-country analysis of pandemic planning and preparedness

The COVID-19 pandemic has heavily impacted upon health and well-being of societies around the globe, triggering inequalities and vulnerabilities on multiple levels. For most countries, COVID-19 posed an unexpected challenge, which required quick action and strategic, effective response from governments and international institutions. This chapter provides a cross-country analysis regarding pandemic planning and preparedness, discussing measures in place before the pandemic, new recommendations or strategies implemented or proposed and summarizes empirical findings in relation to these themes.

4.2 Cross-country measures in place prior to the pandemic and new strategies implemented

Across EU countries, each government applied an individual approach in response to the pandemic. According to the OECD, proper preparedness and recovery in pandemic times require good public governance.[1] A multidimensional approach must be applied, tackling issues ranging from legal and ethical constraints over socio-economic factors to public trust and integrity.[2] Governmental actions must ideally be fast, responsive, effective, and transparent, adapt to the situation, and be accountable and properly coordinated and communicated to societies without neglecting vulnerable groups[3].

Regarding the COVINFORM target countries, most of them have applied a central government approach in response to the pandemic, allowing certain authorities additional scope of action. In some

[1] OECD (n.d.). *Responding to COVID-19: The rules of good governance apply now more than ever!* https://www.oecd.org/governance/public-governance-responses-to-COVID19/ (access 27/05/2021)

[2] The World Bank Group. (2020, April 13). *Governance,* https://www.worldbank.org/en/topic/governance/overview (access 27/05/2021)

[3] The World Bank Group. (2020, March 31). *Governance and Institutions Emergency Measures for State Continuity during COVID-19 Pandemic*, https://pubdocs.worldbank.org/en/333281587038822754/Governance-and-Institutions-during-COVID.pdf (access 27/05/2021)

countries, such as Austria, Belgium, Germany, Switzerland, Spain or Wales, provinces usually obtain a high level of autonomy. However, in response to COVID-19, different approaches can be observed between those countries. In Austria, which is a federal parliamentary republic, the nine provinces had great autonomy before the pandemic, which remained relatively similar after COVID-19 challenged the country[4]. The main responsibility was still in the federal government, mainly the Ministry of Health which was further empowered by additional laws. The country already had a prior epidemic[5] and catastrophe[6] law in place, as well as a pre-existing body to tackle crises.[7] In addition, a new taskforce specifically targeting COVID-19 was created by the Ministry of Health.[8] However, a state of emergency was never declared. Since some restrictive measures were declared as unconstitutional, the Austrian government had to adapt their prior established COVID-19 law.[9]

Belgium, a constitutional representative monarchy, governed under a federal system, includes five highly autonomous regions.[10] The country never declared a state of emergency, but relied on pre-existing and newly founded bodies to respond to the pandemic. For instance, a designated body was established to handle the country's financial situation.[11] In autumn 2020, a new committee was founded as a centre for decision-making. Regulations were issued on a ministerial level, but local governments had the freedom to implement further regulations tailored to their populations.[12] Germany, with its multi-layered state administration, follows a federal parliamentary democracy model. The 16 states within Germany receive high levels of autonomy, which still persisted during the pandemic.[13] Germany's COVID-19 response relied on pre-existing laws and regulations, and a state of emergency was never declared. Health-based regulations were declared by the federal government,

[4] Migration. Gv. (n.d.). *The political, administrative and legal systems,* https://www.migration.gv.at/en/living-and-working-in-austria/austria-at-a-glance/the-political-administrative-and-legal-systems/. (access 27/05/2021)

[5] Republik Österreich. (1950). *Epidemiegesetz*. *Bundesgesetzblatt für die Republik Österreich*, https://www.ris.bka.gv.at/Dokumente/BgblPdf/1950_186_0/1950_186_0.pdf. (access 27/05/2021)

[6] Bundministerium Inneres. (n.d.). *Krisen- und Katastrophenmanagement,* https://www.bmi.gv.at/204/skkm/start.aspx (access 27/05/2021)

[7] Ibid.

[8] Bundesministerium Sociales, Gesundheit, Pflege, und Konsumentenschutz. (2021, April 19). *Coronavirus Taskforce.* https://www.sozialministerium.at/Informationen-zum-Coronavirus/Neuartiges-Coronavirus-(2019-nCov)/Coronavirus---Taskforce.html (access 27/05/2021)

[9] Republic of Austria. (2020, September 25). *Änderung des Epidemiegesetzes 1950, des Tuberkulosegesetzes und des COVID-19-Maßnahmengesetzes (NR: GP XXVII IA 826/A AB 370 S. 51. BR: AB 10408 S. 912.)*, https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2020_I_104/BGBLA_2020_I_104.pdfsig. (access 27/05/2021)

[10] Belgium.de. (n.d.). *The structure of the Federal State and the power levels.* https://www.belgium.be/en/about_belgium/government/federale_staat/structure (access 27/05/2021)

[11] De Standaard. (2020, April 6). *Tien experts moeten België uit lockdown leiden,* https://www.standaard.be/cnt/dmf20200406_04914854 (access 27/05/2021)

[12] Karel Reybrouck (2020, November 13) *Hoe het Coronavirus onze bevoegdheidsverdeling op de proef stelt,* https://www.leuvenpubliclaw.com/hoe-het-coronavirus-onze-bevoegdheidsverdeling-op-de-proef-stelt/ (access 27/05/2021)

[13] The Federal Government. (n.d.) *Structure and Tasks,* https://www.bundesregierung.de/breg-en/federal-government/structure-and-tasks-470508. (access 27/05/2021)

but the states had the power to execute them.[14] On a federal level, four new Acts to protect the population were introduced at several points during the pandemic.[15] Spain, also operating under a multi-layered administrative system[16], allows great autonomy to its 17 communities and two autonomous cities whilst the parliament is the point of decision making for the central government.[17] However, in contrast to the above-mentioned cases, Spain's decentralized model was pressured due to COVID-19, leading to a declaration of state of alarm. This resulted in a direct administrative management and constituted a pandemic coordination based on Single Authority. However, on regional levels dissatisfaction increased, which led to a revision of the state of alarm, changing the single authority into multiple authorities and delegating responsibility to each regional government to adapt the regulations to the status in their area.[18] Similarly, in Switzerland a federal system exists, which allows high autonomy for each of its 26 cantons and shows less involvement of the central government.[19] However, in response to the pandemic this structure changed, making the Health Ministry a strong player in the management, which resulted in a nationally coherent strategy backed up by an existing epidemic law and a newly created COVID-19 act.[20] An extraordinary situation was declared, giving the federal council power to decide upon the entire country without consolidating the cantons. Moreover, new task forces were created to combat the virus.[21] This was a relatively new situation in Switzerland, since cantons usually have a very high rate of independence. However, this shift allowed quicker responses to the situation.

Other countries, with presidential structures, showed slightly different responses. In Cyprus, power is usually exercised via the Council of Ministers and each region is represented by a district officer.[22] The structure did not really change in response to COVID-19 and the central government mainly managed the pandemic. The local governments were not involved in the decision-making but implemented the

[14] Binder et al. (2020). *States of emergency in response to the coronavirus crisis: Situation in certain Member States.* European Parliament. https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649408/EPRS_BRI(2020)649408_EN.pdf (access 26/05/2021)

[15] Bundestag. (Marz, 2020). *Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite,* https://wipolex.wipo.int/en/legislation/details/19754 (access 27/05/2021)

[16] Alba, C. & Navarro, C. (2003) Twenty-five years of democratic local government in Spain. In: Kersting N., Vetter A. (eds) *Reforming Local Government in Europe. Urban and Research International*, vol 4. VS Verlag für Sozialwissenschaften, Wiesbaden. https://doi.org/10.1007/978-3-663-11258-7_10

[17] Eliseo, A. & Colino, C. (2014). "Multilevel Structures, Coordination and Partisan Politics in Spanish Intergovernmental Relations." *Comparative European Politics* 12(4–5): 444–467.

[18] Presidencia del Gobierno. (n.d.). *Estadio de Alarma*. https://www.lamoncloa.gob.es/covid-19/Paginas/estado-de-alarma.aspx#:~:text=El%20primer%20estado%20de%20alarma,provocada%20por%20el%20COVID%2D19 (access 26/05/2021)

[19] Confederation Suisse. (n.d.). *The Federal Assembly*, https://www.eda.admin.ch/aboutswitzerland/en/home/politik/uebersicht/bundesversammlung.html. (access 26/05/2021)

[20] Eichenauer, V. & Sturm, J.-E. (2020). Die wirtschaftspolitischen Maßnahmen der Schweiz zu Beginn der COVID-19-Pandemie. Perspektiven der Wirtschaftspolitik, 21(3), 290-300.

[21] Swiss National Covid-19 Science Task Force. (n.d.). *We identify, analyse and advise*, https://sciencetaskforce.ch/. (access 26/05/2021)

[22] Committee of the Regions (2016). *Cyprus, Introduction,* https://portal.cor.europa.eu/divisionpowers/Pages/Cyprus-Introduction.aspx. (access 23/03/2021)

decisions made by the central government.[23] An expert group assisted the government in their crisis response from a public health view.[24] Multiple presidential decrees were issued throughout the pandemic. Similarly, in Greece, also being a presidential parliamentary republic[25], no new Ministries were established as a response to the pandemic, but a crisis management mechanism was implemented to coordinate actions. Crisis management representatives and ministers from different fields informed the population about the current situation.[26] Nevertheless, the country announced a state of emergency and imposed more than 800 acts of legislative content, which regulated various responsive measures.[27] Furthermore, several presidential decrees were issued by Ministers from different fields, but mainly the Minister of Health.[28]

Ireland, as a parliamentary democracy, had elections shortly before the pandemic[29], but since no party achieved sufficient number of seats to be in charge, a coalition was formed and took on responsibility for the pandemic response.[30] A subcommittee was further nominated for policy directions in response to recommendations by the Health Department as well as a Special Cabinet Committee on COVID-19.[31] During the pandemic, decisions were based on health scientific evidence and disseminated by the national public health emergency team. Ministers from other departments were able to incorporate policies in relation to their relevant fields.[32] Ireland issued a Roadmap for re-opening society and businesses during the first wave[33] and established a Resilience and Recovery Path during the third wave.[34] Israel, also working as a parliamentary democracy, in comparison to most other countries does not have a Constitution and relies on several Basic Laws acting as one and entailing basic state's

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[23] Council of Europe (2020). *European Committee on Democracy and Governance and COVID-19*, https://www.coe.int/en/web/good-governance/cddg-and-covid#{%2264787140%22:[4]} (access 23/03/2021)

[24] Petridou, E., Zahariadis, N., & Ceccoli, S. (2020). Averting institutional disasters? Drawing lessons from China to inform the Cypriot response to the COVID-19 pandemic. *European Policy Analysis*, *6*(2), 318-327.

[25] Hellenic Parliament. (n.d.). *The Constitution*, https://www.hellenicparliament.gr/en/Vouli-ton-Ellinon/To-Politevma/Syntagma/ (access 26/05/2021)

[26] Council of Europe. (n.d.). *European Committee on Democracy and Governance and COVID-19: Greece*. https://www.coe.int/en/web/good-governance/cddg-and-covid#{%2264787140%22:[10]}. (access 26/05/2021)

[27] International Monetary Fund. (n.d.). *Policy Responses to Covid-19. Country: Greece.* https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#G. (access 26/05/2021)

[28] Hellenic Republic. (n.d.). *Legislation On Covid-19,* https://covid19.gov.gr/nomothesia-gia-ton-covid-19/. (access 26/05/2021)

[29] European Movement Ireland. (2022, February*). Irish General Election, February 2020,* https://www.europeanmovement.ie/irish-general-election-february-2020/ (access 26/05/2021)

[30] MerrionStreet.ie. (2020, June 27). *Statement by the Taoiseach Michéal Martin T.D. Announcement of Government 27 June 2020*. https://merrionstreet.ie/en/newsroom/news/statement_by_the_taoiseach_micheal_martin_t_d_announcement_of_government_27_june_2020.html. (access 26/05/2021)

[31] Cunningham P. (2020). *Cabinet sets up sub-committee on coronavirus.* RTE NEWS. https://www.rte.ie/news/2020/0303/1119831-cabinet-meeting/ (access 26/05/2021)

[32] https://www.gov.ie/en/campaigns/resilience-recovery-2020-2021-plan-for-living-with-COVID- (access 26/05/2021)

[33] Republic of Ireland - Department of the Taoiseach; Department of Health. (2020, June 18). *Roadmap for reopening society and business*, https://www.gov.ie/en/news/58bc8b-taoiseach-announces-roadmap-for-reopening-society-and-business-and-u/. (access 26/05/2021)

[34] Republic of Ireland. (2020, September 15). *COVID-19 Resilience and Recovery 2021 - The Path Ahead*, https://www.gov.ie/en/campaigns/resilience-recovery-2020-2021-plan-for-living-with-COVID-19/. (access 21/04/2021)

operating regulations and civil rights.[35] Israel declared a state of emergency and relied on existing governmental entities to respond to COVID-19, adding several new entities.[36] Due to reforming within the government in May 2020, a new commission was founded, consisting of ministers and stakeholders of critical importance.[37] Policy advice was derived from the Ministry of Health, which further activated a specific act to build a national crisis management centre.[38] Italy, as a democratic parliamentary republic, is divided into different regions, which are subject to the power of control by the state.[39] To manage the pandemic, Italy's Civil protection departments, in collaboration with the Ministry of Health and the Scientific Technical Committee, was in charge.[40] Additionally, a special Task Force consisting of 17 experts in social and economic fields was appointed to cope with the pandemic. The overall decision-making and leadership were under responsibility of the Prime Minister.[41]

The semi-presidential democratic republic of Portugal is divided into 20 regions, which do not have the autonomy as provinces in Austria or Belgium. Portugal declared a state of emergency, which influenced the coordination and response to the pandemic. Additional committees and working groups were formed along the pandemic to tackle multiple issues arising in different waves.[42] For instance, several short and long-term programs were implemented to handle the financial situation and support economic recovery. Romania as a parliamentary republic with a semi-presidential regime is divided into 41 counties, which all have a Prefect office, leading and operating the county.[43] In the pandemic response, all decisions were taken based on emergency ordinances issued by the government. Working groups were established and external collaborators were involved to analyse acts on their alignment

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[35] Israel Ministry of Foreign Affairs. (n.d.). *Israeli Democracy-How does it work,* https://mfa.gov.il/mfa/aboutisrael/state/democracy/pages/israeli%20democracy%20-%20how%20does%20it%20work.aspx (access 26/05/2021)

[36] The Knesset (2020, July). *Knesset passes "major corona law" granting the government special powers for dealing with the pandemic.* https://m.knesset.gov.il/en/news/pressreleases/pages/press23720s.aspx. (access 26/05/2021)

[37] Toi Staff. (2020, May). *Government approves new security cabinet, ministerial committee for coronavirus.* Times of Israel, https://www.timesofisrael.com/government-approves-new-security-cabinet-ministerial-committee-for-coronavirus/. (access 26/05/2021)

[38] Public Health Order. (2020). *Israel ¨Contagious disease act¨ for COVID-19,* https://www.nevo.co.il/law_html/law01/502_230.htm. (access 26/05/2021)

[39] Armocida, B., Formenti, B., Ussai, S., Palestra, F., & Missoni, E. (2020). The Italian health system and the Covid-19 challenge. *The Lancet*, 5, E253.

[40] Pistoi, S. (2021). *Examining the role of the Italian COVID-19 scientific committee,* https://www.nature.com/articles/d43978-021-00015-8?fbclid=IwAR3oI9YALbsXH-px1ePQlIVlY33EtILhQeRTSYq9eAkKUgiuVHowjvqP5IY (access 26/05/2021)

[41] Sanfelici, M. (2020). The Italian response to COVID-19 crisis: Lessons Learned and future direction in Social Development. *The International Journal of Community and Social Development*, 2(2), 191-210.

[42] - Order No. 3545/2020 from the Prime-Minister (2020). Diário da República: II series, no. 57-A/2020. Despacho 3545/2020, 2020-03-21 - DRE (access 26/05/2021)
- Rectification Declaration No. 381-A/2020 from the Presidency of the Council of Ministers (2020). Diário da República: I series, no. 90/2020. Declaração de Retificação n.º 381-A/2020 - DRE (access 26/05/2021)
- Order No. 4235-B/2020 from the Prime Minister (2020). Diário da República: II series, no. 68/2020. Despacho n.º 4235-B/2020 - DRE (access 26/05/2021)
- Order No. 6868-A/2020 from the Prime Minister (2020). Diário da República: II series, no. 127/2020. Despacho n.º 6868-A/2020 - DRE (access 26/05/2021)

[43] Chamber of Deputies. (n.d). *Constitution of Romania,* http://www.cdep.ro/pls/dic/site.page?id=339&idl=2. (access 26/05/2021)

with EU legislation.[44] Measures adopted by the law were mainly to increase responsiveness, ensure community resilience and reduce the impact of risks.

Sweden is a constitutional monarchy and did not adapt anything in the governmental structure prior or during the pandemic. Crisis management was based on three fundamental principles: responsibility, proximity, and equality. Thus, actors in certain fields were expected also take on additional responsibilities in times of crises. An emergency was never declared since this is only possible in times of war according to the Swedish constitution. Sweden implemented some containment measures as a response to the pandemic as well as economic measures to support affected sectors.[45] [46] [47] Furthermore, a COVID-19 act was established, giving the government temporary authority for decision-making to issue ordinances.[48] The UK, comprised of Wales, England, Scotland and Northern Ireland and being a constitutional monarchy and parliamentary democracy[49], already had some relevant structures and strategic groups in place prior to COVID-19.[50] [51] [52] As a response to the pandemic, the UK government introduced new ministerial structures to tackle COVID-19.[53] These were, however, replaced in June 2020 by a new strategy and operations' cabinet and new ministerial-led taskforces were established.[54] The UK response can be regarded in four phases, which involved

[44] Governul Romaniei. (n.d.). *REGULAMENT din 13 ianuarie 2005,* http://legislatie.just.ro/Public/DetaliiDocumentAfis/58731 (access 26/05/2021)

[45] Swedish Library of Congress. (2021, July 16). *Sweden: Law Giving Municipalities Authority over Bars and Restaurants Not Complying with COVID-19 Measures Enters into Force*, https://www.loc.gov/law/foreign-news/article/sweden-law-giving-municipalities-authority-over-bars-and-restaurants-not-complying-with-COVID-19-measures-enters-into-force/. (access 26/05/2021)

[46] Government offices of Sweden - Ministry of Justice. (2020, March 13). *Ordinance on a prohibition against holding public gatherings and events*, https://www.government.se/articles/2020/03/ordinance-on-a-prohibition-against-holding-public-gatherings-and-events/. (access 26/05/2021)

[47] Government offices of Sweden - Ministry of Finance. (2021, January 20). *Robust financial support for businesses affected by closure,* https://www.government.se/press-releases/2021/01/robust-financial-support-for-businesses-affected-by-closure/. (access 26/05/2021)

[48] Ibid.

[49] UK Parliament. (n.d.). *Parliamentary constituencies,*

https://www.parliament.uk/about/how/elections-and-voting/constituencies/ (access 26/05/2021)

[50] UK Cabinet Office. (2013). *Preparation and planning for emergencies: responsibilities of responder agencies and other,* https://www.gov.uk/guidance/preparation-and-planning-for-emergencies-responsibilities-of-responder-agencies-and-others (access 26/05/2021)

[51] UK Cabinet Office. (2013, February 13). *Local resilience forums: contact details*, https://www.gov.uk/guidance/local-resilience-forums-contact-details. (access 26/05/2021)

[52] UK Cabinet Office. (2013). *Preparing for Pandemic Influenza,* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/225869/Pandemic_Influenza_LRF_Guidance.pdf. (access 26/05/2021)

[53] Prime Minister's Office, 10 Downing Street, Cabinet Office, Department of Health and Social Care, Foreign & Commonwealth Office, HM Treasury, Department for Business, Energy & Industrial Strategy, and The Rt Hon Boris Johnson MP. (2020). *New government structures to coordinate response to coronavirus,* https://www.gov.uk/government/news/new-government-structures-to-coordinate-response-to-coronavirus. (access 26/05/2021)

[54] UK Cabinet Office. (2020). *Government announces roadmap taskforces,* https://www.gov.uk/government/news/government-announces-roadmap-taskforces. (access 26/05/2021)

different responsibilities, measures and decision-making along the pandemic.[55] Notwithstanding these efforts in the UK, it must be stressed that government responses to the pandemic in Wales, England, Scotland and Northern Ireland were very different and not necessarily coordinated. Indeed, devolved governments in Wales, Scotland and Northern Ireland had responsibility and powers to introduce specific health-related measures, which did not always align with the measures taken by the UK government.

4.3 Cross-country comparison of empirical findings in relation to pandemic planning and preparedness

4.3.1 Austria

In Austria, the federal government was in charge for managing the pandemic. According to the interviewees, the federal government was supported by several committees, which did not have a role in decision-making rather than advise with their expert knowledge. In the beginning, the general public perceived strong leadership by the federal government as positive. However, interviewees expressed that along time measures taken by the government often seemed untransparent and not well understood by citizens, which, in return, decreased compliance. Initially, the stakeholders involved in crises management believed that stressing personal responsibility would be sufficient to create impact; however, soon it became clear that stricter rules and regulations were urgently needed. As a interviewee reported, implementing new laws in Austria is time consuming and counterproductive in times of crises. As a result, measures were implemented without the necessary legal confirmation, which in return created major debates around their legality. Furthermore, Austria experienced new political equilibria that led to changes within governments and institutions, as well as, shifted responsibilities which created loss of connections. Leadership became unclear and along the pandemic, federal state governments increasingly used their authority in terms of taking decisions independently. One interviewee mentioned that multiple concepts have been developed within expert working groups, but most were never put into practice due to reasons such as lack of resources or work overload. One strategy which worked well was the national testing strategy. A significant number of new labs was established to handle high numbers of COVID-19 tests.

4.3.2 Belgium

The interviewees explained that the structure of the crisis management in Belgium, was very complex, and responsibilities kept shifting, which created an unclear picture. Additionally, the federal structure in the country complicated the situation and after changes on a governmental level, responsibilities were amended as well. Interviewees argued that along the pandemic, the response became much more political instead of science-based. Discrepancies between federal and regional levels, often based on financial matters, created tension, and complicated discussions. Multiple players in crisis management supported their own agenda and it was noticeable that political and scientific players did not always agree with each other. Interviewees experienced a lack of transparency and consistency in governmental responses, which may result from this structural complexity. Interviewees revealed that

[55] Hadden, C. & Ittoo, M. (2020). *UK government coronavirus decision making: key phases*. Institute for Government. https://www.instituteforgovernment.org.uk/explainers/uk-government-coronavirus-decision-making-phases (access 26/05/2021)

the COVID-19 policies were much more reactive than proactive and mostly focused on short-term issues. For future crises, a interviewee envisaged to establish a specific Emergency Management Agency. The future response must be more holistic rather than fragmented as it was in response to COVID-19, and a bottom-up response with citizen involvement would be preferred.

4.3.3 Greece

In Greece, the majority of interviewees experienced additional workload, tasks and responsibility in response to the COVID-19 pandemic. Particularly in the early stages of the pandemic, government tasks needed to be adapted and tailored to manage the COVID-19 pandemic in an efficient way According to the interviewees, the introduction of several legislative acts allowed preparation and management of the pandemic, since measures and regulations could now be legally implemented. Most interviewees mentioned that the response and management in Greece was comparable with the majority of responses across EU and adhered to international standards. Various policies increased the containment, control, and management of the pandemic. Interviewees agreed that the intensity of measures was declining over time. Interviewees expressed overall satisfaction with the efficiency of the pandemic management, particularly in the first phases. Accordingly, legislative acts at the beginning of the pandemic as well as additional initiatives to distribute responsibilities for the response increased the effectiveness of measures in Greece. Even though some interviewees mentioned that communication between agencies and the public showed gaps, the majority expressed satisfaction with the coordination between agencies and organizations with central roles in pandemic management. Due to the nature of the crisis, health experts were heavily involved in pandemic planning and responses.

4.3.4 Italy

As interviewees revealed, Italy's response in the early phases of the pandemic mainly involved introduction of policies to contain the pandemic. A nationwide lockdown followed shortly, which was decided upon by politicians rather than health-focused experts. After the first wave, new documents on preparedness were created to handle the anticipated second wave in autumn 2020 and to prevent another lockdown. Afterwards, the next step related to the planning and management of the vaccination campaign, for which a strategic plan was drafted. Interviewees highlighted that all the strategic decisions were centralized, and experts advised the government in decision-making. The Scientific Technical Committee decided on a variety of issues and particularly in the initial phase of the pandemic, the government coordinated all measures with them. Since Italy was the first EU country where COVID-19 was detected, rapid responses and timely decisions were urgently needed. Moreover, when the virus reached other countries, Italy shared knowledge on an international level. Generally, interviewees perceived it challenging to implement effective pandemic management since this was an unknown situation but sharing of expertise across the countries helped to enhance the pandemic response.

4.3.5 Portugal

In Portugal, most interviewees expressed that the COVID-19 changed their working life significantly and the pandemic response was suddenly focus of their daily routine. Interviewees were involved in establishing new strategies, which were informed by academic research. Measures were based on regulations from the National Health Directory as well as on decrees of law. The COVID-19 response was centralized, just as all decision-making. This governmental decision-making was frequently

criticized by interviewees. Ineffective interaction and slow communication between entities and governmental institutions in charge was a challenge, which hampered the pandemic response. Public-private partnerships did not work properly and specific task forces for certain issues were lacking from the beginning. A strong and integrated surveillance system as well as critical reflection on data was needed to better respond to the situation. Moreover, public health personnel were not prepared for this situation and would have needed specialized training. It was further mentioned that the government measures targeting vulnerable groups failed in protecting them from the impacts of the pandemic. However, social and financial support as a relief from the COVID-19 implications was perceived positive. Due to the fast development of this pandemic, it is criticized that responses were often not implemented timely enough. In the future, more immediate, global responses should be applied, and specific strategies tailored to a variety of fields need to be established before the next crisis occurs.

4.3.6 Romania

According to the interviewees, in Romania the National Centre for Management and Coordination of Intervention (CNCCI), an emergency committee originally established in response to earthquakes in 2018, continued to operate during the COVID-19 pandemic. Other institutions were involved in pandemic coordination and management. The pandemic situation intensified the collaboration within the CNCCI, but also external Non-Governmental Organizations (NGOs) heavily contributed to the pandemic response. According to a interviewee, people in Romania did not perceive the measures implemented in the country as the most effective in protecting Romania from social and economic impacts of the pandemic; however, people complied with them. Interviewees reported that the dialogue between public and private sector was considerably improved to reach a consensus in the pandemic management. Relationships were strengthened between institutions, due to this close collaboration and frequent communication. However, some interviewees argued that often responsibilities were not clear among working groups, since competencies shifted, and new responsibilities were assigned. Some experts stressed that the society's trust in the government was already low at the beginning of the pandemic and further declined as it progressed.

4.3.7 Spain

For Spain, interviewees claimed the response to the pandemic was challenging due to the governance structure. Interviewees reported that with the state of emergency, pandemic management was initially centralized, but later competencies were shared with autonomous communities again. The Ministry of Health issued regulations, which were further implemented by regions. Interviewees reported that collaboration between different state agents intensified, new collaborations were established, and external experts were involved in the response. New task forces and working groups were created to structure the pandemic response. Hierarchies became less important, administrative structures changed and government systems became more horizontal. All actors involved closely collaborated, trying to find best solutions as well as a balance between restricting and loosening measures. De-escalation procedures were designed to find the appropriate level of loosening ties between different government organizations within the ongoing pandemic situation. Action plans needed to be adapted and re-established and the Ministry of Health kept generating recommendations. Nevertheless, the actual implementation of new measures very much depended on other bodies and institutions and often required some negotiations. Interviewees agreed that COVID-19 posed a massive challenge nobody was entirely prepared for. The shift of response from co-

governance to governance was challenging and political interests complicated smooth pandemic management. For future pandemics, a clearer system of governance would be beneficial, according to interviewees.

4.3.8 Sweden

In Sweden, interviewees mentioned that within the first months of the COVID-19 pandemic, a clear response structure was missing, and it had to evolve. It was difficult to integrate all relevant stakeholders smoothly to provide an efficient response to the pandemic. Focus was more on extending working areas of existing bodies rather than creating new structures. However, Sweden already had action plans for pandemics in place and according to a interviewee, only shortly before COVID-19 exercises were conducted. For the COVID-19 response, instructions were given by the Public Health Agency and measures were implemented on regional level. The Public Health Agency increased their amount of contact points to ensure smooth collaboration with all actors involved. Some interviewees mentioned that instructions were often given to them on short notice, which made it difficult to quickly respond and put them into practice. In the early phase of the pandemic, communication and collaboration between governmental bodies and organizations was very intensive and existing networks were further developed and deepened. Interviewees mentioned that this pandemic can hardly be compared to any other recent crises, and nobody was prepared for the impacts of the pandemic and the amount of work that its management required in multiple, simultaneous tasks. Interviewees acknowledged that the pandemic will be part of our lives for much longer and thus, it is important to evaluate the responses so far to learn from prior mistakes. Moreover, interviewees believed that establishing a governmental crisis management organization would make sense for tackling any future pandemics.

4.3.9 UK: England

Interviewees from England mentioned that initially the focus of the pandemic response was on public health issues, continuing public administration mechanisms and providing essential services. One interviewee argued that the social care sector was not particularly targeted initially. However, with the continuing spread of the virus and infection of people without the need for hospitalization, the significance of social care became evident, and therefore measures were taken also to address the social consequences of the pandemic. Another interviewee explained that the initial centralised approach by the government to manage the pandemic made it difficult to steer the response and particularly to assist vulnerable populations. Thus, there was a shift to management on a local level, guided by central objectives. Interviewees further mentioned that partnerships between organizations strengthened during the pandemic, resulting in much closer community engagement and communication. Interviewees agree that it is important to keep those relationships also in a post-pandemic scenario.

4.3.10 UK: Wales

In Wales, interviewees mentioned that since the COVID-19 pandemic started, collaborations between agencies and stakeholders have considerably improved. This close collaboration should ideally be maintained after the pandemic, as it helped to address pandemic-related issues more effectively. Interviewees agreed that many policies were introduced on the UK-wide level, which made them difficult to apply in Wales. As a result, often there was a lot of confusion whether new pandemic-related strategies could apply to the entire UK or just to Wales. Multiple changes in actions announced

by different actors of the UK government within a short period of time increased uncertainty and made it difficult for Wales-based inhabitants to comply with the new rules.

4.4 Next steps and recommendations for follow up interviews for next iteration of government analysis

The countries involved in this analysis show different governmental structures, which influenced the response to COVID-19. However, each country declared a central, main point of authority and relied on both pre-existing structures and new bodies to handle the crisis. Some countries already had a crisis management system in place and thus something to build on. Most countries further established new bodies, task forces or working groups handling specific issues in relation to COVID-19. Some countries declared a state of emergency, where they based multiple restrictions on, whilst other countries responded without any such declaration throughout the pandemic. Mostly, final decisions were taken under responsibility of central governments and adaptations were usually possible on other (local, regional) levels. Even though the countries showed similar patterns regarding preparedness and response, each nation followed a very individual path, based on pre-existing characteristics and newly developed strategies.

The expert interviews exemplified that at the beginning of the COVID-19 crisis national governments could not predict or anticipate the intensity and length of the pandemic. In some countries, governmental structures complicated the COVID-19 response and working life of interviewees became more challenging, particularly due to unclear responsibilities, time consuming procedures or competing interests of various actors. Especially when entire governments changed, responsibilities significantly shifted, which caused confusion amongst the population, but also amongst actors involved in pandemic response. However, newly established bodies or task forces were mostly considered as positive in their pandemic response and, in many cases, collaborations were experienced as successful. In most countries, experts played a significant role in the pandemic response, but to different extents. Most of the countries relied on experts in different fields. In some cases, these experts just provided advise to policy- and decision-making. In other cases, governments assigned experts a leadership role for managing the pandemic. Nevertheless, all interviewees agreed that experts must be involved in the pandemic response and decisions should never be based on political interests. Interviewees further agreed that COVID-19 demonstrated how prior crises management plans were not sufficient for dealing with the issues of such magnitude. Current pandemic response and management plans need to be evaluated and dedicated crises response bodies should be established or maintained in every country to be prepared for future crises.

For the following months, further empirical research is anticipated within the COVINFORM project. Additional interviews with main actors from the public sector and experts from different fields of relevance for the project will add to the prior findings and create further knowledge on the COVID-19 pandemic management and response. Currently, the new COVID-19 variant is confronting the globe and multiple countries seem to adapt their strategies. Thus, future interviews will probably involve new insights and aspects in regard to the research questions.

5 Governmental approaches to defining and addressing vulnerability

5.1 Summary of the evolution of governmental approaches to defining and addressing vulnerability across EU and target countries

Generally, national governments in the EU have identified vulnerabilities based on different variables related to e.g., health, cultural, economic, and social factors. In terms of COVID-19, in most cases, those perceived to be more vulnerable were elderly people, people who did not speak the national language, migrants and asylum seekers, single-parent families, or certain businesses, for example hospitality or the arts (see COVINFORM *"D4.1 Baseline report: Governmental responses"*). Health care workers, being those with increased exposure to the coronavirus, were also considered as vulnerable. Approaches to vulnerability, however, have been diversified. Some countries such as Belgium, Greece, or Portugal had a wide approach that mainly defines vulnerability and targets vulnerable groups by providing financial, psychological, or housing support. Other countries did not employ a tailored approach to vulnerability and vulnerable groups. For example, decision-making actors in Austria opted to focus on "at risk groups" rather than touching upon global "vulnerability", which mainly centred on health-related indicators. In some other cases, the consideration of vulnerability varied over the pandemic. For example, in Germany and Italy, vulnerable groups were initially identified based on health conditions (e.g., elderly people, people with pre-existing medical conditions, people with disability). However, later in the pandemic, vulnerability was also conceptualized as a condition at the intersection of health and social and economic variables such as employment (e.g., people unemployed or with temporary jobs), financial resource (low-income people), citizenship status (e.g., asylum seekers, migrant), marginalization (e.g., ethnic minorities, homeless people) or violence (e.g., family abuse) (see COVINFORM *"D4.1 Baseline report: Governmental responses"*).

Indeed, voices are rising about the need to provide a different conceptualization to vulnerability. For example, Di Gessa and Price (2021) claim that in the UK vulnerability should have a wider definition that is able to incorporate the wider needs of the clinically vulnerable elderly people (e.g., long-term health and social wellbeing). For the UK again, Bonomi Bezzo et al. (2021) found that while life conditions have generally worsened since the start of the pandemic for everyone, conditions have been even worse for people living in the most deprived areas of the country. More deprived neighbourhoods tend to be more densely populated with smaller houses and less desirable economic opportunities and living conditions. During the pandemic, people have had limited opportunities to leave their neighbourhood and houses due to mobility restrictions. They have been forced to spend more time at home and to have limited interactions, with impacts on their mental health and psychological wellbeing. In this way, people living in deprived neighbourhoods have usually experienced the effect of the pandemic more severely than those living in less deprived areas (Bonomi Bezzo et al., 2021). Therefore, policy makers need to rapidly act to diminish neighbourhood inequalities which have increased as a result of the pandemic. Similarly, Sinclair et al. (2021) claim that vaccination rollout would be more effective if instead of administering vaccines by age, a spatial approach that looks at other kind of social and economic vulnerability into deprived areas, is employed. The evidence, therefore, drives the need for policy makers and decision makers to approach vulnerability in a way that is not just related to COVID-19 (e.g., shielding) but also addresses pre-existing problems within society.

5.2 Comparison of EU level vulnerability indexes and country-level indexes

Since the beginning of the COVID-19 pandemic, several vulnerability models and indicators have been created at supra-national or national level. An initial review of these can be found in the report COVINFORM "*D2.1 Database containing different data sources"*. Among the others, the COVID-19 Economic Vulnerability Index by the European Investment Bank[56] provides relevant indicators for economic vulnerability, but does not model relevant clinical, health, or social vulnerabilities (COVINFORM *"D2.1 Database containing different data sources"*). Brzyska and Szamrej-Baran (2021) updated this index by replacing the 15-dimensional set of characteristics of the countries with one aggregate, synthetic indicator. In this case, however, vulnerability is mainly described in economic terms. Eurostat[57], the statistical office of the EU, provides high quality statistics and data in the EU, also in partnership with National Statistical Institutes and other national authorities in the EU27. Eurostat also provides relevant data for COVID-19 vulnerability, including data on employment, health conditions, public health, and demography. Vulnerability indexes have been also developed for some European countries (COVINFORM *"D2.1 Database containing different data sources"*).

In the UK, the British Red Cross COVID-19 Vulnerability Index (BRC-VI)[58] was developed to identify vulnerable people whose basic needs are not being met. BRC-VI includes four types of vulnerability: clinical vulnerability for underlying health conditions; health and wellbeing needs; economic/financial vulnerability for employment related conditions; social vulnerability for access to basic resource (food, health, housing, digital tools) (COVINFORM *"D2.1 Database containing different data sources"*). In England, a Small Area Vulnerability Index (SAVI) has been developed to perform a cross-sectional ecological analysis across 6,789 small areas. SAVI assesses COVID-19 mortality in each area in association with five vulnerability measures relating to ethnicity, poverty, prevalence of long-term health conditions, living in care homes and living in overcrowded housing (Daras et al., 2021). In Spain, the COVID-19 Occupational Vulnerability Index is composed of 29 items regarding personal health, working conditions, and ability to comply with preventive measures. It includes relevant dimensions for vulnerability analysis, but it is specific for occupational health of healthcare workers (Navarro-Font et al., 2021). In Italy, a composite index was created by combining inputs from Frailty Index (FI) and Social Vulnerability Index (SVI) (Cerami et al., 2021). In terms of FI, a total of 30 variables, representing symptoms, clinical signs, comorbidities, and impaired functions, were considered, while SVI was operationalized by considering 30 self-reported variables pertaining to social and psychological factors were considered. This composite index can combine health, social and psychological factors, but it is based on a convenience-based sampling and on self-report questionnaires, therefore generalizing its applicability to a countrywide population in a pandemic context might be difficult (Cerami et al., 2021).

[56] European Investment Bank (2020), The EIB COVID-19 Vulnerability Index An analysis of countries outside the European Union, https://www.eib.org/attachments/thematic/the_eib_covid-19_economic_vulnerability_index_en.pdf (access 15/01/2022)

[57] https://ec.europa.eu/eurostat (access 15/01/2022)

[58] British Red Cross Covid-19 Vulnerability Index dashboard, https://britishredcrosssociety.github.io/covid-19-vulnerability/ (access 15/01/2022)

5.3 Representation of vulnerability in government response based on empirical findings

5.3.1 Austria

Vulnerability definition on a governmental level and relation to the expert's organization

One of the interviewees stated that their organization had instruments to define vulnerability, for example the Vulnerability Capacity Assessment (VCA). Through this, various areas of life are assessed, including health, financial capabilities, education, social contacts, violence, susceptibilities etc. This is compared with capacities to improve living conditions, and where there are gaps. According to the interviewee, during the pandemic it was initially not clear who were considered the most vulnerable groups. On the one hand, vulnerability is strongly connected to being exposed to the virus, e.g., through contact with infected persons. This means that those vulnerable are the healthcare workers and personnel in the health sector, that need protection and special attention. On the other hand, this means those persons with which the organization works, in mobile care and emergency services. Special attention needs to be paid, for example, to measures ensuring that mobile care and emergency services do not become vectors for the disease, therefore hygiene is very important. Finally, there are specific groups that need to be identified as they are exposed through their environment, such as taxi drivers, retail workers, teachers, students, and so on.

According to another interviewee, "the state's definitions were made by the national vaccination panel, with the prioritisation of vaccinations. Most vulnerable are the elderly people and those with specific medical conditions, risk factors and expositions. Societal factors are somewhat underrepresented, also due to the fact that [data] are more difficult to collect. These aspects are better known by now; that for example persons living together in a confined space are at increased risk". For another interviewee, in the early stages of the pandemic, a main definition of vulnerability included elderly people (including those living in nursing home), and those exposed to the virus such as healthcare workers, personnel working with COVID-19 patients, homeless, taxi drivers, retail workers, teachers, and those who cannot be reached through communication channels (e.g., non-German native groups). Accordingly, in winter 2021, with increasing cases, vulnerability was also defined to include other groups such as teenagers, migrant persons, low-income people, single parents, or people living in overcrowded housing.

Governmental and organizational responses towards vulnerable populations

According to one of the interviewees, "the coronavirus risk group regulation listed specific diseases that define at-risk groups, including elderly people or those with pre-existing health issues". In addition, the national vaccination panel provided a definition of vulnerability to prioritize vaccination for groups such as elders and people with specific conditions and specific risk factors and exposure. The COVID-19 testing strategy also reflected the definition of vulnerability. Indeed, the strategies followed a hierarchical approach, with persons showing symptoms (and their close contacts) on top (seen as priority), followed by vulnerable groups (including those with health risks and persons in contact such as health personnel), and then by the general population. Another interviewee revealed that the way protective measures (e.g., wearing masks, reducing contacts, washing hands, keeping distance, ventilation) have been implemented "was not consistent". For example, in closed spaces, such as pharmacies or General Practitioners (GPs), some protective measures were adopted, while in

crowded public spaces, such as schools, there were other measures that however have not been consistently implemented.

Good practices and successes

VCA[59] has been a useful tool to assess both vulnerability and capacities of people in several aspects of life (e.g., health, financial capabilities, education, social contacts, violence, and so on). Initially, the main target group were the elderly as most deaths occurred in this group. As a consequence, COVID testing in nursing homes was conducted earlier than in many other settings. A good practice by some organizations, however, was the provision of free testing, to all, not just to those considered as the most vulnerable. In this way, the testing strategy was able to potentially reach every person and to avoid further spread of the virus. It has also been recognized that the presence of public health and medical experts in the national vaccination programme was important, as they gave advice based on medical and viral exposure criteria. According to a interviewee, this was one of the factors that allowed prioritizing vulnerable groups in a more consistent way during the vaccination rollout.

According to one of the interviewees, pandemic measures may have worsened psychological or psychosocial stress, particularly across those elderly who were already socially isolated. Therefore, using communication strategies that did not induce fear was important. In addition, multilingual poster campaigns were launched at the national level to reach non-German native language speaking groups, in cooperation with the Austrian National Public Health Institute (*Gesundheit Österreich*).[60] In winter 2021, the focus of communication shifted to newly determined vulnerable groups. Therefore, the government is, at present, launching new campaigns targeted at teenagers.[61] Training videos have also been recorded for healthcare workers, demonstrating how to correctly wear safety equipment to reduce infection.

Drawbacks, considerations and take away lessons

According to one of the interviewees, “there have been marginalized groups that have been very hard to reach and have been offered limited support”. In addition, there is a lack of socio-demographic data that could be collected more structurally, e.g., through digital tools for contact tracing or adding information. This would significantly improve the quality of data and provide insights on vulnerable people that can be used to inform measures.

5.3.2 Belgium

Vulnerability definition on a governmental level and relation to the expert’s organization

According to one of the interviewees, vulnerability largely stems from three main drivers of segregation. The first driver is communication, as there are groups who do not follow Belgian news and depend on information from social media. The second one is social cohesion; indeed, there is often a strong sense of cohesion among ethnic minority groups that led to increased contact during the pandemic, facilitating infection. The third one is housing. Indeed, lockdown rules hit some families

[59] See a proxy example in Simon et al. (2021).

[60] The Austrian National Public Health Institute that is responsible for researching and planning public healthcare in Austria, and also acts as the national competence and funding centre for the promotion of health. See: https://goeg.at/goeg_glance (access 15/01/2022)

[61] See for example the Ninja Pass campaign to test 12-15 years old: https://www.instagram.com/explore/tags/ninjapass/?hl=it (access 15/01/2022)

harder, in particular large families living in crowded housing. Other vulnerable groups can be added, including people living in poverty, undocumented migrants, people who have recently arrived in Belgium, and people facing racism and discrimination (e.g., Muslim people). The interviewee argued that the needs of these vulnerable groups were not really acknowledged or incorporated into governmental responses, nor a proper definition of vulnerability existed at the governmental level. Also, while technological tools have been developed, such as apps, there is an issue in digital illiteracy that the government did not consider.

Governmental and organizational responses towards vulnerable populations

One of the interviewees reported that the Public Health section of the Federal Public Service[62] is working on a generic preparedness plan for future crises. This plan does not explicitly define 'vulnerable groups' and intends to not predefine them to avoid some groups not being mentioned. In contact tracing and surveillance, it is also necessary to account for the implications of surveillance measures on the whole population, including vulnerable groups, and on the representativeness of these data.

Initially, according to the interviewee, there was not much attention for the differential rates of COVID-19 infection among specific groups, but it was clear that "ethnic minorities were hard-hit". So, the public health service started to improve intercultural mediation in primary care, especially with GPs. The Flemish government translated a lot of its COVID-19 messages, but the information did not reach people simply by being available on the government's website. Therefore, in this instance, the government did not sufficiently consider the needs of vulnerable groups.

Good practice and successes

One of the interviewees reported that good practices were mostly related to the work of community-based organizations which did their best to communicate with and provide support for their members. For example, the Brussels-based organization Foyer[63] created COVID-19 information videos in many different languages to inform those people who did not speak official languages of the country.

Drawbacks, considerations and take away lessons

One of the interviewees argued that one of the main challenges in reaching vulnerable groups is the general disconnect between these groups and the government; therefore, tailored strategies at the federal (national) level are required. Accordingly, a centralized approach is ineffective if the government does now know the local conditions. As the interviewee claimed: "You can't really organize that from a Brussels office, I think that's very difficult…[W]hat does the FPS Public Health know about Molenbeek [multi-ethnic neighbourhood in Brussels]? If you don't have contact with the people there?". In this way, the disparities observed during the pandemic are the results of decade-long segregation, and that this cannot easily be addressed in a crisis situation like a pandemic. From this quote, it is clear that at the local level there is much more awareness of the needs of vulnerable populations than at the higher government levels. Therefore, the interviewee urged the need for a better communication across governance levels, to make sure that local messages arrive to the top. As reported: "the lower you go down the ladder, the more people are aware of the issues that need to

[62] https://www.health.belgium.be/en/health (access 15/01/2022)

[63] https://www.foyer.be (access 15/01/2022)

be addressed in terms of vulnerability, while at the higher level there is less knowledge. Therefore, it should be the top of the hierarchy that should listen to the people on the ground level".

Interviewees also reported bureaucratic barriers that inhibited the implementation of targeted strategies for specific groups of people. For example, when the organization of one of the interviewees proposed to employ intercultural mediators in the vaccination centres, the process for setting up this proposal was very slow and at the end mediators were not employed. Therefore, generally there is good awareness of which would be the pandemic-related measures required to target vulnerable groups, but there is a lack of political will to identify and implement them.

Several lessons, therefore, can be taken. First, a more holistic and multisectoral approach could help better incorporate the needs of vulnerable groups. One of the interviewees mentioned the "missed chance" of implementing a "multidisciplinary perspective" to the pandemic measures, as vulnerable people have not been included in the decision making. This could have reflected more the disproportionate impact faced by large families living in crowded housing. In this way, there is a need to bring more stakeholders around the table, every time, and to think more broadly than just those we need for our daily functioning. In addition, the identification of vulnerable groups requires caution, because it can lead to misplaced generalizations. Indeed, there is need to communicate the underlying causes which make some groups vulnerable.

Notwithstanding these learnt lessons, one of the interviewees argued that this decentralized governance did not work efficiently. Accordingly, there is need for a better communication between different levels of governance, so that the needs of vulnerable groups at the local level are detected at higher levels. The interviewee also emphasized that groups with higher level of social segregation are those who generally have had low levels of trust in the government. The interviewee also added that these groups had the impression that they do not belong to the country, and that messages from the Belgian government are not really meant for them. Therefore, these trust issues (that existed also before the pandemic) must be taken into account.

5.3.3 Greece

Vulnerability definition on a governmental level and relation to the expert's organization

Interviewees agreed on the fact that the government provided a definition of vulnerability that refers to groups including elderly people and citizens with health conditions, inmates in penitentiary institutions, refugees and migrants, homeless citizens, Roma communities, and "isolated" groups that might not have immediate access to healthcare. Most of the interviewees also agreed that with the pandemic the society realizes new dimensions of vulnerability, and there is a need to include societal and economic vulnerabilities and groups that otherwise would not be considered as vulnerable. Accordingly, vulnerability can have a multi-dimensional interpretation. Among these vulnerable groups there are healthcare professionals that are constantly exposed to COVID-19 and workers that must be in their workplace, such as those in the tourism and hospitality sector. These professionals in certain occasions should be placed in quarantine according to the regulations.

Governmental and organizational responses towards vulnerable populations

Most of the interviewees agreed that their organizations addressed the need for protecting vulnerable populations on their agenda. In particular, one of the interviewees emphasized that vulnerable groups should not be targeted and stigmatized and rather require continuous assistance from both the society

and healthcare professionals. Indeed, these groups do not put on an additional risk of infection the rest of the society. Therefore, a variety of initiatives took place to avoid stigmatization, targeting and further isolation of vulnerable groups. A core element of this response was due to a constant engagement by representatives of the Ministry of Public Health, who made frequent references to vulnerable populations. In addition, one interviewee made a reference to mobile healthcare units to accommodate the needs of the public that could not easily have an immediate access to the healthcare system. These mobile healthcare units were particularly effective and useful for groups at penitentiary institutions, refugee camps and temporary placement facilities, as well as for homeless citizens' facilities and other "isolated" social groups. In addition, interviewees highlight that decision makers considered equality and equity when drafting, adopting and implementing policies and measures, particularly factors such as the cost of tests, the inability to work due to COVID-19, unique characteristics of these groups based on geographic, societal and economic data which allows for tailored measures and responses.

Good practices and successes

Most of the interviewees agreed that the governmental response was tailored and immediate and included measures targeted towards vulnerable populations such as vaccination of individuals in psychiatric wards and institutions, refugee facilities and elderly healthcare facilities. This was swift course of action and implementation with the utilization of the National Public Health Organization (EODY)[64] mobile healthcare units. Additional tailored responses and measure adjustment were also made to address the needs of vulnerable groups to increase the effectiveness of prevention responses as well as to implement actions for financially supporting business owners and employees with various benefits, due to disruption of their professional activities. Nevertheless, inequalities in health-based measures also appeared despite mitigation efforts.

Drawbacks, considerations and take away lessons

A few participants claimed that the implemented measures such as restriction of mobility to contain the virus, which was rather socially intense, managed to change the daily lives of the citizens.

5.3.4 Italy

Vulnerability definition on a governmental level and relation to the expert's organization

According to one of the interviewees, in the first phase of the pandemic, the Italian Government and the Scientific Technical Committee did not identify any specific vulnerable population but just referred to "a general reference to fragility". However, the interviewee claimed that during the vaccination campaign, the Italian Government began defining vulnerable groups such as elderly people or healthcare workers to establish prioritizing criteria for vaccination at the beginning of the campaign, when vaccines were not fully available. In the interviewee's opinion, this helped to manage the vaccination campaign effectively.

Governmental and organizational responses towards vulnerable populations

One of the interviewees claimed that no specific measures have been implemented by the Italian government to protect vulnerable populations. However, from December 2021, the interviewee was

[64] https://eody.gov.gr/ (access 15/01/2022)

confident that "the Recovery Plan funded by the EU[65] should help the government to re-design primary care, by creating health districts that provide services for elderly and vulnerable people, and by strengthening the role of the GP to reduce the pressure on hospitals". However, the interviewee also recognized that "critiques claim there is no evidence on the cost-effectiveness of these health districts".

Good practice and successes

As one of the interviewees revealed, a good practice by the Italian government has been the vaccination campaign. The interviewee reported that the vaccination campaign in Italy "provides a good example of institutional response to the challenges of the pandemic on vulnerable population". Accordingly, the identification of elderly people as a vulnerable population, indeed, helped to establish priorities and ensure high vaccination rates among this group. Another good practice was that later in the vaccination rollout, the vaccine was made available also for undocumented migrants.

Drawbacks, considerations and take away lessons

One of the interviewees argued that, in Italy, reformulating the primary care system is necessary. Indeed, the residential care facilities have shown their fragility during the COVID-19 outbreaks, in particularly in the first waves. Therefore, this system needs to be remodelled.

5.3.5 Portugal

Vulnerability definition on a governmental level and relation to the expert's organization

As one of the interviewees reported, "in the early stages of the pandemic, vulnerability mainly included people affected by special conditions (e.g., 50 years old person with previous heart surgery)".

Governmental and organizational responses towards vulnerable populations

Positive responses by the government included public health access, elderly, and disadvantaged areas. One interviewee revealed that the Portuguese government indeed ensured a temporary regularization of all immigrants[66], to grant them full access to public and health services, just like any other Portuguese citizens (access to testing, free consultations upon COVID symptoms, and vaccination). The interviewee claimed that this contributed to a decrease in discrimination against immigrants with no regular status and also made people feeling safer.

In addition, in the first phases of the pandemic elderly care facilities took several mismanagement practices that led to high infection rate; for example, one of the interviewees reported that some facilities had 75% of infected people in one week. Therefore, the government put these facilities under tight surveillance and asked them to implement pharmacologic measures and use disinfecting equipment. The elderly population was also prioritized in vaccination rollout, and this allowed the vaccination program to go smoothly. Disadvantaged neighbourhoods (*"bairros sociais"*) with lower socioeconomic conditions had higher infection rates at certain stages of the pandemic. Therefore,

[65] European Commission (2020). Italy's recovery and resilience plan, https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility/italys-recovery-and-resilience-plan_en (access 15/01/2022)

[66] See Raposo and Violante (2021).

public health agents worked with some community groups to reach and to act along with e.g., certain ethnic groups to mobilize the population towards regular testing and vaccination.

Good practices and successes

A interviewee reported that in some areas (e.g., by the Lisbon City Council)[67] a process of identification of vulnerable groups, including homeless people, people using drugs, refugees, LGBTI groups was implemented with follow-up programs. There were also social security measures for those who lost their jobs and for disadvantaged groups, as well as resources were granted for homeless people including food, shelter, protective equipment, and health monitoring (including vaccination). Economic measures were also provided to support companies and workers. In addition, a hotline and face-to-face support were available for victims of domestic and gender violence.

Drawbacks, considerations and take away lessons

One of the interviewees argued that the Portuguese government "took a very centralized and state-owned approach, and private hospitals and private doctors did not perform as they should have done". The centralization had more negative than positive consequences. Indeed, while the Government, the General Health Board and the Health Ministry had full control of operations, public-private partnerships in the health sector did not perform as they should have done. Portugal was also slower in the implementation of pandemic-related measures, and therefore was less effective in ensuring an immediate monitoring of the pandemic and in supporting those most in need. According to the interviewees, to prevent future epidemic outbreaks, the public health bodies should be more prepared through the creation of a national pandemic task force. In addition, elderly care facilities and their staff should be better managed and increase their preparedness. Also, it is important to improve the work and housing conditions of vulnerable and marginalized groups.

5.3.6 Romania

Vulnerability definition on a governmental level and relation to the expert's organization

According to a interviewee, "the vulnerable people have always been a priority at the political level, requiring more attention… due to the special situation they were in". Therefore, the organization of the interviewee has taken the necessary steps together with the local medical units in order to ensure access to medication and special treatments. Another interviewee highlighted that "the lowest vaccination rate was for the people of 80 years and older, while this being the age group at the highest risk of being infected with COVID and the largest group of people currently in the intensive care unit."

Governmental and organizational responses towards vulnerable populations

According to interviewees, the Romanian government made efforts to undertake measures for reducing the effect of the pandemic on vulnerable groups, both during and after the state of emergency. As a interviewee claimed: "The government's agenda has been shaped by reference to vulnerable groups according to the evolution of the pandemic."

[67] Cities for Globah Health, Lisbon measures to fight COVID-19 outbreak https://www.citiesforglobalhealth.org/initiative/lisbon-measures-fight-covid-19-outbreak (access 15/01/2022)

Good practices and successes

One interviewee highlighted the hospitalization of patients who required emergency interventions as a good practice. A non-emergency protocol has been also implemented for those with less severe symptoms, in order to avoid hospitalization and to not put pressure on hospitals.

Drawbacks, considerations and take away lessons

One interviewee reported that several GPs refused to get involved in COVID-19 vaccination, even after being paid extra per injection. Accordingly, just 30% of family doctors vaccinate in their own offices. In addition, as a interviewee said, misinformation campaigns, supported and coordinated from outside Romania, contributed to decrease in the population's trust in their government.

5.3.7 Spain

Vulnerability definition on a governmental level and relation to the expert's organization

According to one of the interviewees, vulnerability is a concept wider than the one that has been employed during the pandemic in Spain. Indeed, the definition of vulnerability initially focused mainly on those people with clinical pathologies. However, when the vaccination campaign was designed, other people got infected and were identified as vulnerable, including seasonal workers in the agricultural sector, and young and healthy people. Therefore, the concept of vulnerability varied with time. As the interviewee reported that "in the vaccination plans, for example, age has been the first criterion, but then other people were prioritized such as transplant recipients or people with disabilities. A decision matrix was also realized and included social or economic variables to prioritize. Notwithstanding this, institutions did not use those variables as they considered the decision matrix too complex and focused mainly on age and health conditions".

Governmental and organizational responses towards vulnerable populations

The organization of one interviewee created new clinic pathways and centres, and protocols and clinical guidelines to improve their healthcare service provision. One of the interviewees also reported that while the ERTE (the Temporary Workforce Reduction Programmes instrument)[68] has focused on employees, it also regulates other groups including women, housewives, young people, and the part-time workers. ERTE also mentions some productive sectors that could be considered vulnerable in the long run and establishes mechanisms that allow workers to learn new skills that can be used for job searching and improving their employability.

Good practices and successes

For one of the interviewees, the vaccination campaign in Barcelona[69] represents a good practice for Spain. Accordingly, "instead of asking people to go to health centres for their vaccine jab, the vaccine campaign directly reached those people who had difficulties in access". Therefore, the campaign has reached people that otherwise would not be vaccinated. In addition, partnerships between

[68] El Pais, Spain's ERTE furlough scheme is extended to September 30 https://english.elpais.com/economy_and_business/2021-05-28/spains-erte-furlough-scheme-is-extended-to-september-30.html (access 15/01/2022)

[69] Ajuntament de Barcelona, Vaccination against COVID-19, https://www.barcelona.cat/covid19/en/vaccine-against-covid-19 (access 15/01/2022)

municipalities, the Ministry of Agriculture and companies provided support to temporary workers and to improve their living conditions.

Drawbacks, considerations and take away lessons

According to a interviewee, the system needed more time to work more efficiently. For example, the public administration has complex rules to ensure its functioning. In a pandemic context, this implied that both the institutions and the people needed time to understand these rules and to make the system working properly.

5.3.8 Sweden

Vulnerability definition on a governmental level and relation to the expert's organization

An interviewee claimed that "there is a close relation between a generally good public health, trust in authorities and resistance towards contagious diseases". Therefore, it is acknowledged that aspects such as living conditions, jobs, and work contacts affect the spread of the virus. In addition, vulnerable people are those living with mental illness, children experiencing difficult home environments and, lastly, elderly people. For one of the interviewees' organizations, as well as on a governmental level, vulnerable populations are those "groups that are difficult to reach" (*"svårnådda grupper"*), in particular those living in the eastern parts of the city where the organization is located. One interviewee also mentions that the medical staff is a vulnerable group. Other vulnerable groups are people involved in prostitution, homeless, or suffering from drug addiction. Elderly people, those living in elderly homes, and immigrant groups are also mentioned as vulnerable. Another interviewee revealed that the target groups related to COVID-19 have changed throughout the pandemic. Indeed, initially elderly people were identified as vulnerable due to risks associated with age, with the organization directing efforts towards elderly care facilities and domestic care services. However, with the vaccinations the target groups are changed, and one also needs to consider that "there is a more cultural undertaking in certain religions for example, or certain ethnical groups, that they actually do not want to get vaccinated".

Governmental and organizational responses towards vulnerable populations

The mission of one of the organizations, according to one interviewee, is "to work with public health issues and to address, in terms of equality, towards those groups in society that have the greatest needs of promotional and preventive measures, and who also risk having the greatest illness". The organization therefore collaborated with the World Health Organization (WHO) to work with vulnerable groups and to inform about the impacts of COVID-19 on different groups in society. One interviewee claimed that there were lower vaccination rates in certain areas, therefore their organization appointed some experts to work with those groups that are difficult to reach. For example, the organization worked with local "cultural interpreters" and "healthcare interpreters". Teams of doctors also reached different social groups to explain the importance of vaccination. The physical presence of doctors and the translation services "have been essential" to explain the advantage of vaccination and therefore "can increase the vaccination rate". Another organization worked in mobile teams out in cafes and shelters to reach people living in prostitution, homelessness, or drug addiction. These were described as "selective measures and broad efforts working parallel to each other". Similarly, to reach targeted groups, one organization made available and translated contents into different languages, while also providing national phone lines in a variety of languages. New contact services have been implemented, while externally contracted health communicators have

been dispatched to distribute printed material in 20-30 different languages. The organization also provided assistance to regional councils as well as religious organizations.

However, one of the interviewees claimed that there is a difference in terms for vulnerability between some ethnic groups and people involved in prostitution, homeless, or suffering from drug addiction. The interviewee claimed that while the ethnic groups do not have particular difficulties in accessing to health information and services (e.g., calling the 1177 telephone/website service providing health information and services), "they do not want to". Conversely, for the second group "their challenge is mainly getting to a health facility in the first place", but "there is less resistance" in accessing health information and services.

Good practices and successes

One interviewee claimed that working with the previously mentioned cultural and healthcare interpreters has been successful for the organization, although in some areas has been more challenging than other, and reaching e.g. 60% of the vaccinated people required a "major effort". The alternative communication means through phone and digital activities has been also mentioned as a positive example of availability for groups of people that already have established contacts with the organization. Other interviewees mentioned that successful strategies are those touching upon the wellbeing of employees to get them vaccinated, tailoring communication to different target groups, translating material in different languages, and cooperation with regional councils.

Drawbacks, considerations and take away lessons

One interviewee reported several drawbacks in government responses. For example, the pandemic caused increasing mental health problems (e.g., due to increased loneliness due to isolation), but the government did not pay enough attention to them. Also, in the early stages of the pandemic, "a lot of people cancelled their domestic care services. They have now returned, and today people do not cancel their domestic care services fearing infection". In addition, there have been conflicting messages in the initial stages of the pandemic, and this "made it difficult to address staff with advice on how to act to reduce the spread of infection or not to become sick themselves". In terms of lessons, one interviewee reported that it would be good to vaccinate all healthcare workers, therefore it should be explored, looking into "whether it can be legislated to demand healthcare workers to be vaccinated". Also, one the interviewees' organization will continue its efforts to target communication based on behavioural knowledge. The interviewee therefore claimed: "what we most certainly will continue with, is to become even better in… tailored communication…about mental health and about health issues in general". Another lesson is related to the use of social media in government communication. Indeed, according to a interviewee, with the telephone switchboard being overloaded during 2020, new contact services were implemented, including social media. Also, one interviewee said that the vaccination rates in some areas "increased when the region had enough vaccine to provide drop-in vaccination"; therefore, having more available vaccines "would have been ideal from the very beginning".

5.3.9 UK: England

Vulnerability definition on a governmental level and relation to the expert's organization

The organization of one of the interviewees in England considers vulnerability to the COVID-19 pandemic in three dimensions. The first dimension consists of individuals who were vulnerable prior

the pandemic and received social care or healthcare support. In this way, the organization had to think about how to support them (e.g., in terms of food and medicines). The second dimension consists of groups that are vulnerable due to high risk of COVID-19 related mortality (e.g., obese people or ethnic groups,). This required engagement with communities, also to avoid stigmatization and stereotypes. The third dimension consists of people that are vulnerable due to limitations in everyday life because of isolation and social networks collapse. This includes people with mental health issues and the so-called "just-about-coping people", such as, those who are just able to pay their bills, who have lost their job or went on furlough during the pandemic. Another interviewee reported that his organization directly works with vulnerable populations, including prisoners, people under social care, homeless people, people over 65, as well as people that are immunocompromised or have special needs. For this interviewee's organization, the definition of vulnerability is the one defined by the government that "focuses in particular on aged people and immunocompromised persons".

A third interviewee revealed that their organization defines vulnerable people as "those living a life which they are unable to afford the basic things to live a normal life". For example, "they cannot afford food, or have health conditions". In relation to COVID-19, vulnerable people are those "over 60 years old with more than 2 morbidities that if they get infected they would die, those with cancer, high blood pressure, over 65 years old, people with disabilities". This interviewee also claimed that vulnerability conditions did not change across the pandemic waves, but they just exacerbated, and their situation just worsened.

Governmental and organizational responses towards vulnerable populations

For one of the interviewees, defining vulnerability is not an issue in terms of government response. Even if a different definition of vulnerability is provided, "being successful or not into government response depends from people to people". In terms of elderly people, for example, the government implemented protective measures, but respecting them or not was a personal choice.

The organization of one of the interviewees realized that further to health issues there were other impeding necessities in relation to the pandemic. For example, locally a large number of families were hungry due to job loss or unemployment. Therefore, the organization targeted people from different ethnic minorities, as most of them cannot stay at home to reach the workplace and a high number of deaths was recorded in these groups. According to the interviewee, people went into anger and now are at the stage of COVID-19 fatigue, where they do not want to know about the pandemic.

Another interviewee provided a more articulated comment on vulnerability and claimed that his organization decided to adopt a more citizen-centred approach. Specifically, the interviewee revealed that his organization "has 890 so-called Community Champions, as well it commissions 90 community organizations and puts additional money in volunteers at the local level. The program Community Champions[70] helps in providing information on risk reduction and vaccination across the community. The program was launched in the summer 2020 based on a model in London. The Champions have a code of conduct, they have a weekly seminar where they make questions to the interviewee. The program evolved since 2020, and now also includes now youth champions and business champions. Champions disseminate information into their 'WhatsApp' groups and friends, so in their personal and

[70] Birmingham City Counil, COVID-19 Community Champions, https://www.birmingham.gov.uk/COVID-19_Community_Champions#:~:text=The%20COVID%2D19%20Community%20Champion,and%20others%20against%20the%20virus. (access 15/01/2022)

social networks, and provide feedback to the organization in terms of communication and misinformation. The organization also uses these champions to test communication language and about vaccination and testing strategies. Therefore, the organization has a communication engagement team that work on these champions".

Community Champions also work with ethnic communities. So, the Community Champions program can be considered a form of co-production. For example, Community Champions from Gypsy and Roma communities told the organization that its COVID-19 related information did not arrive to the communities as they did not have smartphones and their English literacy was low. So, they suggested to adapt the message in a very simplified English and to send it by text message instead of 'WhatsApp'. In this way, the organization co-produced a solution with them. Another example comes from the Bangladeshi, Pakistani and Indian communities that did not use the antigen testing kits provided by the organization. So, the organization worked with the Champions to better understand and overcome potential concerns in using antigen tests. It became apparent that some community members found it difficult to self-test with the antigen kits as the instruction were 17 pages long and overly complicated. So, the Champions suggested to do demonstration of the kits in the mosque before the Friday pray. The interviewee recognizes that this has been successful in generating an uptake of antigen testing. Also, the organization worked with the deaf community to simplify the language used in government COVID-19 communications into English sign language.

In England, each municipality has a public health authority that is accountable to the chief of the local council. So, every week the interviewee had a confidential meeting with the England public health secretary to ask questions related to pandemic policies. At the local level, the interviewee also met with the members of parliament and the lead of the council and the chief executive on a regular basis. In addition, there are weekly briefing webinars with government departments. Further to these meetings, the interviewee has to attend other meetings at national level given their national role into higher education policy on COVID-19. There are also formal structures of communication called local resilience forums, consisting of a partnership between the municipality, the police, health sector and emergency services that starts to meet when government announce an emergency.

Good practices and successes

One of the interviewees reported that the national government had difficulties in assisting vulnerable groups. Indeed, the government in England tried to manage the pandemic with a centralised approach, but along the time it realized that providing money for local governments would have been better to strengthen local response. Therefore, the interviewee claimed that strengthening local pandemic management is a lesson learnt from the government in England, where there is too much population to be managed centrally. At present, the objectives are still decided at the central government level, however they are managed at the local government level.

Drawbacks, considerations and take away lessons

According to one of the interviewees, the England definition of vulnerability is tight, but after the pandemic there should be a wide reflection on what vulnerability means. Indeed, the interviewee admitted that COVID-19 did not create inequalities but just exacerbated them and did show pre-existing issues in the society. Also, it is acknowledged that people see and trust the government in very different ways. For example, if your family has a member in social care, you might have one view about

the government response, but another person who has been ok in these times might have a different view.

According to an interviewee, another point is the distrust of most vulnerable people, in particular those from the ethnic minorities and those with lower incomes. People's feeling generally started with fear at the beginning of the pandemic, because they did not know what was going on, so they were frightened. People did not receive messages that they can trust quick enough; so, some people refused to go into hospital because they were saying "if I go to hospital, I would not come out because a lot of people died", and passed away at home.

5.3.10 UK: Wales

Vulnerability definition on a governmental level and relation to the expert's organization

According to one of the interviewees, there are many people that have many issues in relation to the pandemic that we are not aware of. Some people are frightened, others have additional health needs, there are lonely elderly people, also people with dementia for which health conditions have worsened. Therefore, the organization of the interviewee supported lonely elderly people through looking for volunteers that can help these people in some of their everyday activities, e.g., buying food. Another interviewee revealed that the condition of vulnerability has different grades but can be defined as the one for which a person "is unable to look after themselves for physical and/ or mental reasons, that can be a permanent situation, it can be a transient situation, and basically, is dependent on the help of others".

Governmental and organizational responses towards vulnerable populations

One of the interviewees reported that social services were not fully prepared to deal with the pandemic. They were not able to carry on their caring role, due to the amount of work and time required and the pressure on service. For example, in Swansea it was difficult to provide domiciliary care as it was difficult to go from home to home in a safe manner with the potential risk of catching COVID-19, while the workload also increased given that staff absences (as care staff got infected and had to self-isolate). There was also a problem of retention for both public and private residential care, and of the supply by domiciliary care firms as these decided that they would not deal with COVID-19. This forced all their clients to find an alternative provision in terms of them being looked after. All these mentioned issues put pressure on the social services, and from a Council point of view.

Good practices and successes

One of the interviewees reported that community ties are very important in Welsh villages. Indeed, solidarity mechanisms worked well to support vulnerable people in rural settings with close-nit support networks. For example, local volunteers in a Welsh village have played an important role in supporting lonely elderly people, delivering them food, or supporting other needs. In this village there is also a system of street wardens, to check whether vulnerable situations might emerge in the community. Informal networking also works to protect the most vulnerable. For example, through local connections some people requested or highlighted the needs for a vulnerable person known to them. Another interviewee highlighted that the vaccines have been very effective in reducing the impact of COVID-19 on hospitalisation and mortality rate. Accordingly, Wales has been relatively successful in rolling out vaccination quickly and providing boosters.

5.4 Next steps and recommendations for follow up interviews for next iteration of government analysis

The findings have provided relevant information for a better understanding of vulnerability. It has been found that governments adopted very different definitions of vulnerability and that the definition of vulnerability changed with time. Changes occurred when governments realized that not only elderly people, who were primarily considered the most vulnerable, but also young and seemingly healthy groups experienced vulnerability due to the consequences of COVID-19. Therefore, it is recommended for the follow up interview for the next iteration of government analysis into WP4 to explore how the concept of vulnerability into governments changes across different pandemic timelines (and their agendas), in particularly between pre and post vaccination rollout, and in younger populations, or those who were deemed clinically vulnerable.

The findings also revealed that vulnerability is a condition that varies across individuals and groups based on their sociodemographic characteristics (e.g., ethnicities, resource access). In this regard, several interviewees acknowledged that vulnerability is not just a condition related to the pandemic. Rather, they argued that the pandemic often exacerbated pre-existing vulnerabilities and touched upon longstanding challenges faced by many people in their communities. Therefore, it is recommended to explore the governments' perceptions about pre-existing vulnerabilities and consider whether and how governments have been able to integrate and address vulnerable groups into policy and planning in the short and long term.

In addition, findings also highlighted that notwithstanding some positive experiences across the countries, there has been limited trust by local communities and vulnerable groups towards the governments. Also, it has been revealed that the higher (national) government levels do not always engage with the local level (e.g., local governments, community groups, vulnerable groups) to understand local needs. Therefore, it is important to explore how governments perceive the limited trust towards them, the reasons and the consequences, and how they can address this to support future engagement.

6 COVID-19 responses on multiple levels of governance

6.1 Summary of COVID-19 responses on multiple levels of governance across EU and target countries

Over the last two years, national governments have faced an unprecedented crisis due to the spread of COVID-19. The challenge of dealing with a global pandemic meant that immediate political action was necessary, in order to safeguard public health. The traditional political system was, arguably, put to the test as governmental structures, response plans and strategies had to quickly adapt to the new situation. A comprehensive analysis of the multi-level governance systems was carried out under COVINFORM report *"D4.1 Baseline report: Governmental responses"*, which highlighted the most significant outcomes of the adopted policies in 13 European countries[71] with the addition of Israel and the UK (England and Wales).

[71] Austria, Belgium, Cyprus, Ireland, Italy, Germany, Greece, Portugal, Romania, Spain, Sweden, Switzerland.

The target countries, despite their structural differences, followed a relatively similar path in dealing with the pandemic. The majority of them adhered to a centralized response plan, with the central government being the main actor in the decision-making process. To specify, in countries that adhered to the federal political system, like Belgium, Austria, Germany and UK (Wales and England), decisions were made on both national and regional levels, with local institutions being involved in both the conceptualization and application of the policies. On the other hand, in countries whose political system is a parliamentary democracy or republic, it was the central government that organized and strategized the appropriate response plans, while municipalities and regions had a supporting role, especially in the implementation of the measures. Furthermore, it should be highlighted that while some of the countries, like Sweden, Germany, and Belgium, decided to use their pre-existing legislature as a legal basis for the urgent policies, others declared their State in an Emergency situation *stricto sensu* so that the new measures are not in direct contradiction with their constitutions.

Those new measures were the outcome of each country's strategic planning that was based on either new or pre-existing mechanisms. To clarify, all the countries under research followed a top-down approach, which relied on their established authorities to tackle the crisis (Ministerial bodies, governmental institutions, etc.), while creating new entities to manage the situation. More specifically, Austria's main actors were the federal and province governments, and the Ministry of Health, which created a new body called the "Corona Taskforce". Belgium's response initiated from both central and local governments. On the one side, several Risk Management groups were established, which, in their majority, answered to the Minister of Security and Foreign Affairs, while, on the other, Local Governments also implemented a number of restrictive measures. Similarly, Germany's response was heavily coordinated centrally, but the Lander Governments (regional) also adopted extra restrictive measures by declaring their regions in a state of catastrophe. Even though Switzerland follows a similar federalist political system, the central government and the Swiss Federal Council announced that they will be responsible for handling the situation without the need to consolidate with the cantons on the decision- making process, which is not the regular democratic process that the country follows. Greece followed a traditional top-down approach as well, as the pre-established Ministries dealt with the crisis, with the majority of responsibilities being held by the Health Ministry and Ministry of Citizen Protection. Similarly, the central government and the health authorities spearheaded the response in Cyprus.

The approach in Italy, Israel, Portugal and Romania did not differ to a great extent, as they all relied on their central governments to carry out the response but created a vast number of subcommittees and taskforces that helped monitor and control the pandemic. In Ireland the measures were introduced by the central government along with a Special Cabinet Committee on COVID-19. The department of Health, the National Public Health Emergency Team, and a number of various sub-committees were also crucial as they allowed the other ministers room to adopt new policies related to their department. Spain, initially, introduced the Single Authority to lead and coordinate the responses under the supervision of the central government. However, after disagreements regarding the legality of this action, control was given to several regional delegated authorities, which decided the nature of the measures according to the immunological data of each region. As far as the UK is concerned, the four nations that comprise it cooperated to deal with the pandemic. Decisions were mainly taken on a central level by the UK prime minister and the cabinet alongside the Department of Health and Social Care and several other advisory groups. On a local level, in Wales, the public health department manages the health emergencies consistent with the UK's Civil Contingencies Act 2004; however, it

also considers that exist the Welsh devolution and the power for Wales to manage health-related issues. Finally, the responses in Sweden were taken on a central level with some support from regional authorities and with little to no change from the pre-COVID-19 era.

The common denominator between all the new bodies was the involvement of non-political personnel either in a consulting or a decision-making capacity. Members of the scientific community, crisis professionals and experts from various fields were deployed not only to better handle the crisis and ensure that all other essential public administration mechanisms continue to properly operate, but also to raise the level of trust from the public towards the Governmental responses.

6.2 Cross-country comparison of COVID-19 responses on multiple levels of governance based on empirical findings

6.2.1 Austria

Most of the interviewees suggested their professional environment was under a lot of pressure due to the excessive workload and strong involvement in the crisis management on a multiple level within their organization. Moreover, some interviewees expressed their frustration due to slow implementation of measures from the government whereas clarifying that added stress stems from the increased infection risk that healthcare professionals are faced with. Austria, like Belgium, has a federal operational structure. An indicative example of the system is the interagency cooperation state crisis and disaster management, the central committee of the crisis management and the advisory committees, including the ministry of health.

Interaction between stakeholders

The Austrian federal operational system allowed for enhanced interagency cooperation. This was particularly apparent according to one interviewee, as his affiliated organization had an auxiliary status which meant the entity would support and contribute to a network of organizations when their assets and resources would be overstretched and over-burdened due to the workload from the increased infection rate. According to some interviewees, unfortunately many networks were lost due to the negative impact of personnel changes within the government, ministries, and the Corona Taskforce. As experts left their role due to their demanding nature, work-rate and responsibilities, this personnel change introduced an interagency cooperation and communication weakness because, often, experts did not know who to contact when urgently needed. Residents would provide inquires and feedback to the Corona Taskforce and relevant agencies, mainly to express complaints on the know-how of conducting antigen self-tests by pharmacists, whereas the Corona Taskforce would strive to answer these inquires.

According to another interviewee, the cooperation between the federal and local governments was rather smooth. Examples of stakeholder cooperation are the Corona Taskforce with the chamber of commerce, local authorities, pharmacists, particularly on working environment screening programs data collection and data entry. Moreover, the Corona Taskforce closely connects with the National Crisis and Disaster Management, which are located in the Interior ministry as well as with other ministries. Some interviewees highlighted a structural weakness regarding stakeholder cooperation, particularly the dissemination and implementation of innovative ideas and concepts. Interviewees noted that many concepts were readily available to be implemented, such as data management, test

strategy and contact tracing, nevertheless they were not implemented due to acute workload, resource linear scalability versus exponential development of methodology and solutions.

The interviewees, touching upon communication, suggested the lack of crisis communication plans in Austria. Some interviewees further elaborated that as COVID-19 is a new crisis, agility and resilience are needed whereas most entities adhered to the strategy of testing, tracing and isolating, similarly to most EU countries. Crisis management aims at minimization of losses through the first chaotic phase of a crisis and then establish a new system, building on the old, which intends to boost resilience. The Austrian public health communication campaign team would meet daily and then 2 – 3 times a week to conduct workshops aimed at finding ways to effectively reach citizens. Similarly, to most EU countries, Austrian organizations utilized a wide range of means and platforms to wage their information campaign, which was led by the central authority (government), thus, adopting a top-down approach. Stakeholders had an intertwined relation as community associations and organizations would communicate with healthcare stakeholders on a federal level, particularly regarding infection containment within specific at-risk groups such as migrants and asylum seekers. Moreover, according to most interviewees, Austrian stakeholders had international pandemic experience to draw knowledge from, utilized their international federation, and relied on established communication channels while adhering to strategies and guidelines provided by international organizations, such as WHO, similar to most EU countries. A interviewee involved in crisis communication explained that cooperation with the media was necessary but sometimes inadequate to achieve behaviour change. The interviewee's organization expressed caution regarding the short-term effectiveness of communication with the utilization of fear, claiming that these worries were ignored by the political structure, whereas recommending that experts handle the crisis communication.

Most interviewees, particularly those engaged in crisis communication, expressed the need for a universal, transparent communication with clear messages regarding measures and vaccination efforts, similar to Greece, Portugal, and Belgium. In addition, references were made that an Austrian political party in cooperation with a private TV channel, has communicated non-evidence-based information about COVID-19, which increases scepticisms of the population and indicates social strife. Concluding, most interviewees firmly believed that the role of the media should be researched in detail, indicating that the media should abstain from over-representing differentiating views held by the minority of scientists that may disagree, over-emphasizing death rate without a mention of other contributing factors. Interviewees suggested that the media may indirectly and directly increase public confusion and socio-political instability, whereas they should strive to responsibly counter misinformation, propaganda and fake news by conveying news based on official, valid, evidence-based data and facts, utilizing official sources and adopting an impartial, professional attitude.

6.2.2 Belgium

In Belgium, interviewees experienced an increase of their work hours, participation in crisis and consultation committees and were engaged in COVID-19 governance at multiple levels such as federal, regional, and local. In addition, national agencies such as the Agency for Care and Health hired additional specialized personnel due to the volume of added work, whereas apart from scaling up existing groups and services within the organization, there were also new COVID-19 specific initiatives such as the mobile healthcare teams. A interviewee described the COVID-19 pandemic as a "tsunami which completely overwhelmed the normal operation" which forced the agencies to create crisis cells,

supported by teams such as the environmental health team, general prevention team, and the primary care team.

Interaction between stakeholders

Most of the interviewees highlighted the complexity of the Belgian governance system and crisis management structure with regards to cooperation and coordination. The fragmentation and confusion about division of responsibilities among governmental organization at different levels suggested this often slowed down decision-making, and the division of responsibilities meant sometimes it was hard for the federal government to have local impact. In addition, according to the interviewees, bureaucratic barriers, lack of political will and interagency cooperation weaknesses across the various governance levels (federal, regional and local) were also important challenges and urged the need for a restructuring of the governance infrastructure. One interviewee suggested that interagency cooperation between the Agencies for Care and Health and Social Services has been successful when addressing the needs of perceived vulnerable individuals, thus achieving a broader welfare landscape. Nevertheless, the interviewee revealed tension between agencies when designing COVID-19 responses as the medical sector would suggest 'evidence-based' responses in comparison to broader responses from social services and the broader welfare sector. Quarantine coaching and the vaccination efforts were another result of interagency cooperation success.

Further, the decentralization of governance is still insufficient. This suggests space for improvement, in particular by improving communication across different governance levels. Notwithstanding this, progress occurred in terms of inter-stakeholder cooperation. All interviewees reported stakeholder competitiveness between federal and local government levels, and tensions related to stakeholder coordination and communication at federal and regional levels. These tensions were mostly due to budget allocation and financial resource differences. Another challenge was the lack of communication between the governmental entities at federal and local levels underlining an important structural issue. Similarly, a interviewee highlighted coordination-related challenges between local and central levels of governance, particularly in the context of contact tracing. This initially occurred mostly at the local level, but when it was set up at the central (federal) level as well, the process did not always proceed smoothly due to stakeholder tensions. The interviewee suggested that the fragmented division of responsibilities in Flanders is one aspect of the problem. Regarding bottom-up initiatives, one interviewee suggested that coordination and collaboration structures were not sufficient, whereas another interviewee highlighted the importance of community-based organizations which did their best to communicate and provide support for their members. A interviewee, active in crisis management, reported increased knowledge exchange at the inter-federal level.

Representatives from the different regions and agencies shared their experiences and insights about successful and unsuccessful strategies; however, they also suggested room for improvement. Most interviewees suggested investing more in long-term collaboration and trust-building with grassroots-level organizations and expect a beneficial impact on local, regional, and federal levels. Regarding communication, again the complexity of the Belgian governance system makes it difficult to decipher who is responsible for developing inclusive COVID-19 communication. However, it was mostly the regions who had the responsibility to work on communication efforts. Some interviewees suggested that public trust has diminished over time due to the lack of transparency in COVID-19 communication and consistency in government policies. Most interviewees suggested the adoption of more holistic and multisectoral approaches whilst highlighting the importance of communication and countering

fake news. One interviewee considered the National Crisis Centre did a good job at communication, which is not mutually shared by everyone at the policy level. Concluding, a few interviewees suggested that public trust and "willingness to cooperate" was higher in the beginning and diminished over time adding also that social segregation was intensified among some groups.

6.2.3 Greece

In Greece, interagency cooperation, communication, and coordination have played a crucial role in the response against the pandemic, both during the pre-vaccine and vaccine era. Added pressure and fatigue mounted due to multiple interagency daily meetings, long work hours, frequent travel and enhanced work-related tasks and responsibilities which were reported by all interviewees. According to interviewees, this work rate was required to acquire a pragmatic perspective to cope with the pandemic and therefore to provide tailored responses to achieve a high degree of accuracy and effectiveness through targeted initiatives. The state response against the pandemic on national, regional, and local levels, on both executive, management and administrative levels was assisted with the introduction of a plethora of legislative acts, such as ministerial decisions. Furthermore, most interviewees agreed that Greece adhered to the main European response and international standards, implementing measures that were also adopted by other EU countries. Despite operational challenges, the management of the pandemic was based on top-down tailored containment measures and responses, framed by local community characteristics. This was feasible due to the creation of an epidemiological map which included a multi-level classification of infection rates, ranking each municipality. Interviewees also agreed that resource-asset allocation, recruitment specialized staff, strategic planning, and a holistic approach with enhanced multi-agency cooperation along with tailored responses were key factors.

Interviewees found consensus on best practices that stem from inter-agency cooperation and a top-down approach, specifically highlighting legislative initiatives, digitization of services, employment of healthcare personnel, movement restriction – lockdown implementation during the initial phases, provision of free antigen COVID-19 test to the public and self-test at schools, organized vaccination mechanism, information campaign, the implementation of a testing database and the border control methodology of "exhaustive tracking", utilization of the algorithm Empathic Visualisation Algorithm (EVA)[72] and the application Product Lifecycle Management (PLM).

Interaction between stakeholders

Most interviewees agreed that the degree of cooperation and communication between agencies and organizations had a beneficial central role in combating the pandemic. In addition, interviewees stated that the utilization of a variety of digital communication means for information exchange and emergency cases had a pivotal role and were very effective. Notable entities that cooperated towards commonly achievable goals were the Ministry of Education, Ministry of Migration, the EODY and General Secretary of Citizen Protection. According to interviewees, the presidency of the Government undertook the role of the multi-agency coordinator in online conferences and meetings. A interviewee highlighted the various issues with interagency coordination, nevertheless, claims that this is a global phenomenon. According to interviewees, healthcare professionals' expert opinions had been prioritized due to the nature of this crisis. The National Public Health Organization had to shoulder the

[72] See https://www.civilprotection.gr/el/simantika-themata/nikos-hardalias-sti-voyli-pros-tin-antipoliteysi-gia-ton-algorithmo-eya-epilegete (access 15/01/2022)

burden of healthcare-related strategic planning and implementation of healthcare protocols, channeled to the National Epidemiological Committee for evaluation. Upon a positive evaluation, these protocols were disseminated to the General Secretariat of Civil Protection for official implementation. COVID-19 presented an opportunity towards state digitization which was prioritized parallel to the containment measures. Over 1,200 platforms and 320 services of agencies are provided throughout government websites. Concluding, some interviewees noted that investments should be made on healthcare-related prevention mechanisms and first-grade healthcare mechanisms in conjunction with setting distinguishable limits of administrative responsibilities for the agencies involved.

According to the interviewees, governmental communication policy and strategy had a top-down approach which was adopted by the Ministry of Health and the National Vaccination Committee that handled official information dissemination with weekly public interviews and through social media. One of the biggest challenges was the dissemination of fake news, misinformation and conspiracy theories that were countered by the public statements of healthcare professionals and government representatives. A wide variety of means were utilized to investigate fake news and their degree of influence in order to create appropriate and tailored response to misinformation. Most interviewees concluded that continuous effort, substantial resources and tailored to the target group, simplified conveyance of scientific information towards the public, albeit not easy, are crucial to fight misinformation and achieve positive public engagement. Interviewees have different observations regarding public trust. Some interviewees indicated high activity on official websites and inquiries in a bottom-up approach, and therefore suggested the inclining public trust rate towards stakeholders. Meanwhile, some interviewees suggested that specific groups of citizens are more susceptible to misinformation, fake news, and suspicion and demonstrate declining levels of trust towards the State. The multidimensional consequences of COVID-19 decrease public tolerance for measure implementation; thus, interviewees agreed that revision of measures and methodology should be conducted based on the effectiveness rate which may lead to readjustment or change of methodology.

6.2.4 Italy

Italy shares relative similarities with Sweden and Spain (see respective sections) in terms of the division of public power and territorial distribution at various levels, although the former is a Parliamentary Republic and the latter a Parliamentary Monarchy. However, during the development of the pandemic, the Italian national government seems to have had more control over the decisions taken to deal with the health crisis, compared to Spain and Sweden.

In the case of Italy, interviewees stated that their professional environment had to cope with high workloads, especially during the first months of the pandemic. In the specific case of health professionals, high workload was compounded by long working hours. A interviewee also recognized the high emotional and personal cost that the pandemic had on their daily lives; having to deal with situations such as: the risk of infecting their family members, fear, fatigue, anxiety, endless shifts, etc. They agreed that they experienced it as a battlefield during a war. Regarding the internal organization of work, some of the interviewees admitted that one of the biggest challenges was the resetting of all work areas and activities. Additionally, it was necessary to create differentiated pathways and dedicated areas for the care of COVID-19 patients in the hospitals.

Moreover, some of the interviewees claimed that, in terms of intergovernmental relations, Italy followed a top-down approach, characterized by centralization. Strategic decisions to address the

health crisis were approved by the Government and subsequently implemented by the regions. One of them points out that the government only cooperated inter-institutionally with the Scientific Technical Committee, especially in the first stage of the health crisis. Most stakeholders expressed doubts about the effectiveness of information campaigns during the crisis and still considered it a fundamental tool for prevention in the short term.

Interaction between stakeholders

At the level of intergovernmental relations, the health crisis did not provoke a change in the function of Italian political-administrative structures to cope with the pandemic. Institutional engineering and the distribution of public power was not significantly altered in the context of COVID-19. A interviewee stated that the Italian government centrally controlled the management of the health crisis and was at the forefront of the strategic decisions to address it, advised by the experts of the Scientific Technical Committee, while the measures adopted by the government were implemented by the regions. In this way, a top-down approach prevailed, consistent with the distribution of competencies in the Italian Republic.

In terms of inter-institutional interactions, some of the interviewees noted that the virtual meetings allowed them to exchange information with officials and experts around the world and to obtain real-time feedback, saving time and resources with such exchanges. Regarding the public and third sector relations, some of the interviewees pointed out that the evolution of the pandemic highlighted the lack of a care network to attend to the most vulnerable populations, especially the elderly and migrants, both at primary care and hospital level. In terms of international cooperation, one of the stakeholders emphasised cooperation between experts and health professionals from different EU and non-EU countries, sharing experience and knowledge through virtual meetings. During the first months of the pandemic, with no previous experience on SARS-coV2, Italy became a reference for other countries on how to deal with this crisis, being the first European country to face COVID-19.

Communicatively, most of the interviewees recognised the effectiveness of the vaccination campaign, especially those targeting the most vulnerable population. This resulted in very high vaccination rates in this population. However, on a general level, some of the interviewees noted that the communication campaign, especially the government's information campaigns directed at citizens, were often confusing, and some of them doubted the effectiveness of these campaigns.

6.2.5 Portugal

In Portugal, most interviewees experienced an added volume of workload with numerous conferences, group meetings, either on-site or in online platforms which, according to some interviewees, limits interaction between parties. Online platforms are less time consuming but limit interaction. Daily meetings for most interviewees were limited to seven participants per meeting, individual cabinets, mandatory masks, and reduction of employment-related cohabitation as well as increase in telecommunications averaging three to four days per week. Additional employees were hired, particularly for contact tracing, with an increase in new tasks and reorganization of work. Some interviewees, due to their role, changed their commute routine from public transportation to a personally assigned agency car and driver. They reported a widespread fear that stems from their colleagues emphasizing infection diaspora to their families. They told us that their work environment was affected strongly by this widespread fear. One interviewee suggested a more disciplined telecommuting management is required, indicating the need of both on-site and via-distance working

as a sign of solidarity. Most interviewees highlighted the need for information on hygiene practices, physical distance, and disinfection in daily lives. Interviewees suggest to not live in fear of a potential infection but embrace hygienic practices and behaviours that stem from COVID-19's lessons learned. Some interviewees find consensus in conducting small conferences of healthcare experts of 1 hour each semi-annually or quarterly on new ways of working safely.

Interaction between stakeholders

Interviewees appeared to be polarized regarding interaction between stakeholders. Some interviewees stated that Portuguese stakeholders have failed in creating mobilized efforts to establish public-private partnerships. Portugal adopted a more centralized system regarding the public health centres and crisis management mechanism rather than decentralized services. One interviewee expressed concern that the Ministry of Health or the Public Health Directorate might not hear voices raising from the public health sector, whereas private health entities may not have been engaged in this collective effort as they should have. One interviewee highlighted the difficulties which relate to evaluating public and private entities. Nevertheless, stakeholders were obligated to work with each other to maximize the efficiency of work in various networks of analysis and interventions, particularly at a national level, indicating enhanced interagency cooperation between public health units. The same interviewee explicitly noted high rate of cooperation and coordination between national, regional, and local level.

In contrast to other interviewees, a interviewee suggested newly found governmental and non-governmental cooperation, particularly working on cases with vulnerable groups. This interaction included the provision of healthcare equipment, food and materials needed to directly assist vulnerable groups. In some cases, weaknesses were observed to the cooperation between governmental stakeholders due to lack of clarity regarding the areas of responsibility. Decision making process and communication between entities was slow due to the lack of a centralized approach by an entity with deliberative power, apart from consultative responsibilities. Regarding lessons learned and future adaptations, most interviewees highlighted the importance of interagency communication with the public, stating that the latter is a crucial actor in the implementation of measures and control of virus transmission. Similar statements were expressed by both Greek and Belgian counterparts. A interviewee suggested that cooperation with NGOs was based on funding programs and the goals were consensual. This allowed a smooth workflow of operations with good communication between parties. The interviewee provided the example of regular weekly testing in a partnership between the city council and the *Santa Casa da Misericórdia* (a Catholic brotherhood) that formed brigades with the mission to test and isolate nursing home workers, implemented locally and with a potential to be implemented on a regional and national scale. Interviewees suggested that interagency cooperation has allowed a successful vaccination mechanism, which was handed to a figure with leadership skills, sense of authority and personal sympathy.

Citizens in Portugal as in most countries are in a disagreement towards vaccines and measure implementation due to a variety of contributing opinion-shaping factors. Thus, interviewees stressed the importance of the media and conveyance of clarified information to the public. Regarding communication, a interviewee expressed that the EU and network of experts would disseminate information to Portugal and data from Public Health Directorate and Public Health services would be shared in a vice-versa exchange. Another interviewee who actively engaged in this process stated that this exchange would involve close communication between agencies, organizations, local partners,

local entities, institutions, schools, and elderly care facilities among other entities. Moreover, another interviewee suggested emphasis on a bottom-up approach, specifically that national organizations should be more proactive instead of waiting for recommendations of specific measures by an international organization like WHO, thus emphasizing an anticipatory attitude towards measure implementation.

Some interviewees made a reference to municipality level communication efforts which adhered to Directorate of Public Health and the Regional Health Administration' guidelines, highlighting challenges to approach young urban citizens, due to their interpretation of the virus. This interviewee has suggested that since Vice-Admiral Gouveia e Melo, the person who led the government taskforce that coordinated the vaccination efforts, directly confronted the anti-vaccine groups, as a highly respected individual, a system of employing young journalists and students from superior communication courses could be built to conduct campaigns targeting the youth, thus, the minimum age gap and similar notion would facilitate effective communication with the youth. Concluding, interviewees suggest that COVID-19 provided an opportunity to bring forth a more scientific approach to strategies of communication and behavioural change, indicating the importance of political impartiality, consistency of information sources, tailored information campaigns with utilization of role models (e.g., national celebrities/football team) to increase the effectiveness to young audiences and decrease distrust.

6.2.6 Romania

In Romania, interviewees reported the increased use of online communications, daily meetings, and work-via-distance to limit the spread of the virus. Moreover, the need to develop necessary skills, identify and adapt to the new way of working was rather challenging. Most interviewees stated that inter-agency collaboration was frequent, whereas a interviewee has stated that the attribution of accountability, prioritization and assignment of responsibilities were also frequent challenges that most professionals faced. According to another interviewee, there was some inner-agency conflict regarding who will be working from home.

Interaction between stakeholders

Interviewees from Romania explicitly discussed about the ever-increasing inter-agency cooperation between the public and private sector, despite common challenges. According to interviewees, governmental stakeholders such as the National Centre for Management and Coordination of Intervention, Public Health Directorate, Ministries of Health and National Defence as well as NGOs such as Red Cross, Rescue 4x4 would intensively cooperate as the pandemic persisted, despite some cases of potential liability breach. Public-private sector cooperation was also reported. Moreover, COVID-19 presented an opportunity for entities such as trade unions, employers, local businesses to work with public-interest stakeholders in an organized way at the highest political level, indicating a mixture of bottom-up and top-down approaches as well as an enhanced inter-stakeholder communication, aimed at reaching consensus to ensure continuity at the state of emergency. Further, several interviewees highlighted the evolution of multilateral professional relations between partners, indicating that the pandemic facilitated fertile ground for solidarity, respect among stakeholders' opinions and decisions as well as developed stronger interpersonal ties on national, regional and local level. This is also a lesson learnt and potential future adaptation according to most interviewees, underlining the importance of strong foundations built upon multi-stakeholder cooperation in their response against similar crises.

Similarly, to other interviewees, Romanian interviewees suggested that vaccination and information campaigns and measure implementation was conducted with the cooperation of political authorities and medical representatives, thus a centralized top-down approach based on concrete data and figures which has likely increased public trust toward official representatives. A wide range of communication means and methods was utilized, mainly televised media. Interviewees also stated that misinformation influenced public distrust of a certain portion of the overall population. They suggested that communication and good cooperation between the central authority and news outlets is a key element, which rely upon respecting the role and competencies of each entity. A interviewee reaffirmed the importance of media conveyance of official and valid information, while carries on specifying that misinformation attempts were made to present protection measures as coercive, overemphasizing on the negative aspects. In consensus, another interviewee suggested that the media ought to trust their governmental sources and transmit the information without hidden interests and not truncated or modified. This has also been indicated by their Greek counterparts. Concluding, some Romanian interviewees would respond to citizens petitions in a bottom-up approach, whereas some interviewees suggest that not all press releases had the desired effectiveness, indicating that stakeholders should invest in crisis communication.

6.2.7 Spain

Almost all scenarios in March 2020 considered that by summer 2020 the pandemic situation would have been improved. However, ignorance and uncertainty have defined this two last years. Interviewees highlighted the need to generate investigations and evaluations that will help to understand what has happened within different administration levels and be able to answer better in a potential future crisis. It is important to generate some knowledge and basis for the future policy makers who could use these guidelines.

COVID-19 has introduced an unprecedented increase in the workload in all public decision-making spheres in the country. The timescales were very short, the uncertainty margin was enormous and the margin for error, minimal. In some departments efforts have been tripled, more than 12 hours a day have been worked, including weekends and holidays. Mention of the extra pressure of COVID-19 was a common element in all the interviews. It was not only healthcare professionals, experts and decision makers working so many hours but the fact that those hours were intense and exhausting.

Even the design of the public policies could be considered as solid and detailed. Interviewees underlined the fact that the implementation of these measures has been the responsibility of other agencies such as the national and local police, or the army. In their own words, this means that no matter how detailed suggestions for measures were, they had to be as restrictive as possible to avoid risky situations for public health, such as the collapse of the hospitals. There have also been legal and political barriers to be able to implement the measures that were necessary from an epidemiological point of view. The State of Emergency was only the legal tool available to apply general mobility restriction measures. The need to act in accordance with the legal frameworks in an efficient and swift manner has led to the modernization of the public administration's data integration systems. The autonomic distribution of competences inspired a radial model of data integration. Each community collected its own information and sent it to the central core of the State. This process was inefficient and too slow for a rapidly evolving situation like this one, sometimes taking months. These systems have been modernized in such a way as to automate all these procedures.

Interviewees believed that communication strategies have been ineffective in conveying information clearly. The fact that the national and regional governments did not want to fail in their predictions meant that their strategies were based on the precautionary principle. As a result, potential scenarios that are not very encouraging have been constantly put forward. This may have had a despairing effect on the population. Interviewees have pointed out that the fact that information was centralized in a few figures has led to confusing the policies technical motivations with political motivations. These figures were mainly the Prime Minister, the Minister of Health, the Minister of the Interior, some representatives of the army and the Director of the Health Alerts and Emergencies Coordination Centre. This has generated distrust towards the sources and the message.

Interaction between stakeholders

COVID-19 has been a challenge regarding the governance and administration structure of the country. Interviewees reported an intensification of contacts and collaboration among state agents and with other organizations. The public administration has required constant expert support to reduce the margins of error and improvisation in policy decisions made in an unprecedented health crisis. New patterns of collaboration between ministries and other entities have been generated to maximize the effectiveness of the state apparatus. Contacts with international organizations such as the European Centre for Disease Prevention and Control (ECDC) and EU agencies have been intensified. At the national level, contact between regions has also increased. Constitutional instruments such as the Interterritorial Council or the Conference of Presidents have worked perfectly. In the beginning of the pandemic power was first centralized through the State of Emergency and its extensions. During the second State of Emergency, some competences, like health, were returned to the autonomous communities. Therefore, there has been an increased rate of collaboration, the climate of negotiation has been a constant, between actors, organizations, and territorial levels.

Interviewees argued that collaboration between regions has worked more than ever. The Interterritorial Council, a constitutional instrument of the autonomous administration, has reached unanimous agreements for the first time in its history. More horizontal governance models have been generated in which hierarchies were not so relevant as previous stages.

Despite the recently mentioned increase in stakeholder collaboration, some interviewees considered that this collaboration has not always been loyal and has been ad hoc at certain times. There are still clear barriers between the administration and the external agents. Interviewees reported that measures and public policies were mainly based on experts' advice. Many working units corresponding to the Ministry of Health and the Coordination Centre for Alerts and Health Emergencies have had an impact on the policy making process. Since this is an unprecedented problem, there have been different lines of action. Collaboration between different areas of knowledge has been required in order to manage the pandemic with guarantees. Task forces and interdisciplinary working groups have been organized. Hierarchies have been blurred and previously unheard-of channels of exposure and listening have been opened. At these tables, public health experts have had an enormous relevance compared to their previous possibilities and advised the country's top management.

6.2.8 Sweden

Sweden is a parliamentary monarchy with clear territorial divisions. Sweden's territory is divided into provinces, administered by a Civil Government, which in turn are divided into municipalities, also administered by a Municipal Government. According to all interviewees, every administrative

structure and institution has been under enormous pressure. The case of Sweden has been no different. Interviewees have been clear about their situation, which has often been on the edge. Public workers have been constantly exposed to public debates, some of them even report having received letters, threats, protests, and so on. However, all interviewee demonstrated that civil servants' commitment to the public function is unquestioned. Sweden's central government, more precisely the Public Health Agency, has been a key figure in the administration of the pandemic. The Public Health Agency had a crisis plan that was useful in other pandemics such as Ebola or the Avian Flu, but they had to update it. The Pandemic Plan 2009 has been one of the frameworks within which the crisis has been managed. However, it was updated in terms of hygiene protocols, provision of protective equipment and staff. Top-down management at this point has been key.

Interviewees considered communication as a controversial element through all pandemic stages. The Public Health Agency was given the responsibility to communicate COVID-19 evolution and updates in terms of infection rates, new measures, and so on. Sometimes though its recommendations were confused with political proclamations and were underestimated because of it. Some interviewees complained that confusing, contradictory messages were given to the citizens, but also to the institutions. They often complained that the information came late so there were periods when the different levels of administration were somewhat blind. Therefore, they had to adapt to changing messages. One interviewee, for example, referred to the vaccine procurement and distribution strategy. He defined it as a non-entirely strategic or transparent process. Regarding vaccine availability promises of dubious credibility were made.

Other external social actors such as domestic workers and care facilitators, have also been involved in policy-making relationships, and provided with guidance, assistance, and knowledge.

Interaction between stakeholders

According to interviewees, the Public Health Agency has been a key figure in the administration of the pandemic. This institution under the Health Ministry initially adapted its organizational chart to a crisis model system in order to be more operational. However, it went back to normal shortly afterwards, so as they were able to work with their classic model. The Agency adapted its management systems to the requirements of COVID-19. The work units were restructured at the same time as new work units were created, and agendas were reorganised. Basically, it became a COVID-19 management monograph. The Public Health Agency has been able to carry out its duties by adapting its structures to the pandemic. It first mutated into a crisis state with crisis teams, and then reverted to its usual form of natural management and control. Key was the increase of staff in communication and epidemiology duties. Informants reported that the Public Health Agency has been able to achieve its goals through loyalty and internal commitment.

Interviewees reported that the Public Health Agency is an institution that has been greatly digitised and that has favoured the exchange of staff and knowledge. The Public Health Agency has been in contact with the State Secretariat, with the Ministry of Health and Social Affairs and in general with the whole Government. Its recommendations have been very important for the policy making process so that the dialogue between administrative bodies has been fluid. It also played a key role in communicating COVID-19 different reports to every part of the country. This role in communication has meant that the Public Health Agency had to be very strict in everything it conveyed, both externally and internally.

As interviewees revealed, the central government, supported by the Public Health Agency, transmitted action guidelines, restrictions, and public measures to the Regional Governments. They have been catalysts for policies and recommendations decided at higher administrative levels. However, some interviewees belonging to the regional level have claimed a lack of strong national leadership, especially during the first six months of the pandemic. It was then when more communication and cooperation was needed. Later there was a natural learning process that has eased governance guidelines. Subsequently, better communication synergies were established. After the first months of the pandemic, communication between the local, regional, and national levels has been stable. Informal networks and contacts between actors have been used as channels of communication and collaboration. At the regional level, Infection Disease Control and Health Care Hygiene have been key institutions. Channels of cooperation and information have been reliable and open. Staffs' flexibility to work in unfamiliar fields has been decisive in being able to apply expert knowledge into policy making process in a cross-cutting manner.

At the municipal level, interviewees spoke of a clear evolution in the dynamics of cooperation and collaboration. Before the COVID-19 crisis, relations between municipalities were not fluid, there were frictions. However, COVID-19 has softened these dynamics. The Municipal Council has had a broad relevance, sometimes even surpassing the Regional Council. The Municipal Executive Office has been relevant. Solidarity and constant support among municipalities and regions have been key. This solidarity was more likely at the beginning of the crisis than now, when reserves and resources are weaker.

Interviewees from regional and municipal institutions distanced themselves from this top-down narrative of fluid and transparent communication and coordination climate. They claimed that the government has not provided them with sufficient guidance. Sweden's Government lack of clarity and authority has sometimes led to that each administration would have to organise itself. This has led to inefficient and uncoordinated administrative responses. The lack of information transmitted from higher levels of the country's administration has led to mistrust and frustration among lower administration spheres. More clarity from national agencies was sometimes lacking.

6.2.9 UK: England

In England, in general, the implementation of the measures to respond to the COVID-19 was carried out by several operating agencies such as the National Health System (NHS) or the Police Department, among others. All of them acted under the scope of the Civil Contingencies Act, a civil protection legal umbrella adopted by the UK Cabinet Office.

According to the interviewees, the emergence of COVID-19 brought about, in different ways, a change in the organisational functioning and structure, as well as the regular processes of the local administration. The health crisis forced an accelerated digitalisation of the local administration, especially of its processes and procedures for serving and communicating with citizens. This organisational change is also observed in most European countries. Although the digitisation of public administration was a pending issue in the updating of public management, the emergence of COVID-19 made it necessary to urgently accelerate this digitisation to ensure the continuity of the provision of local services. One of the interviewees lamented that they only had 4-6 weeks to assess and implement all those procedures that could be carried out online. Another interviewee admitted that, in a very short time, they had to offer a large volume of services in the online mode, as well as to carry out many of the administration's processes remotely by working from home or self-isolation. In the

same vein, additional funding for municipal governments was provided to increase their response in the context of the health crisis in England. As a result, many services today can be done online. Thus, the organisational and professional experience of the health crisis showed that public administration and stakeholders were able to adapt to online or remote working. This is a lesson learned and good practice recognised by the interviewees.

In terms of the personal environment, local government bureaucracy in England seems to have followed the general trend of an overburdened administration, especially during the peak months of the pandemic. Similar to most of the target countries, one interviewee noted that the daily routines of his working environment were transformed by COVID-19. Specifically, the regular working day, before the pandemic, gave way to long working hours of more than 12 hours per day, in some cases including weekends, and with workloads that did not allow for a work-life balance. However, interviewees stated that the organisational changes introduced because of the pandemic also favoured a more horizontal hierarchical relationship and a more direct relationship between local officials, practitioners, and policy makers, as well as greater collaboration and closer contact with stakeholders.

To carry out the implementation and monitoring of the adopted measures, a multi-layered coordination and communication approach between the different actors was necessary, in particular between the municipalities and public health Secretary and also members of local Parliaments. Apart from these meetings, a more formal communication was established through the Local Resilience Forums, especially to maintain coordination between the Municipality and the agencies responsible for the implementation of the measures, such as the emergency and health sectors, the social services, or the police.

On the other hand, and following the logic of the public policy cycle, the evaluation of both the decision-making process and the implementation, as well as of the communication strategy, remains an unresolved issue in terms of Transparency. Although one interviewee stated that this issue was on the table during the health crisis, he also acknowledged that the emergency did not allow progress to be made in this regard.

Concerning the communication strategy, interviewees stated that communication was conducted on two levels, one at central and one at the local level. Its aim was not only to achieve behavioural change but also to combat misinformation. However, one of the interviewees regretted that the government ministries did not always comply with the norms for communication with media and, according to him, this caused misinformation. Interviewees also pointed out that at the local level communication had to deal with a lack of trust between local communities and the government, as well as situations arising from inequalities in the most vulnerable communities.

Interaction between stakeholders

In England, intergovernmental and inter-agency relations were essential for the coordination and local implementation of the measures and responses adopted by policy makers to address the COVID-19 health emergency. However, the allocation of roles and responsibilities to actors at different political and territorial levels was not always the same throughout the different waves of the pandemic. According to one interviewee, at the beginning, the national government managed the crisis centrally, but along the time national authorities realized that it was more effective to provide local governments with the necessary funds to implement the measures taken to mitigate the effects of the pandemic. The implementation of measures to address COVID-19 is currently managed through local governments. This is especially relevant in the case of services to care for vulnerable populations or at-

risk groups. One interviewee admitted that COVID-19 showed the limitations of social protection policies, insofar as the health crisis exacerbated inequalities between the most vulnerable populations and the rest of society.

In terms of governance, collaboration and coordination between national and local governments were strengthened, as well as cooperation between the public sector and civil society became much tighter, especially in the provision of health and education services. The cooperation of the media was also essential, especially in the context of the vaccination campaign. In this regard, interviewees pointed out that their organisation interacted with a broad range of stakeholders, agencies, government departments, and, in general, authorities of different political-territorial levels. Interviewees also stated that this multi-layered coordination and collaboration approach contributed to reduce the previous distrust between central and local governments.

In a global and international context, the interviewees highlighted the establishment of relationships between politicians, officials, and professionals from different cities around the world to exchange views on how to tackle the health crisis in its different socio-political dimensions. These global networks of cooperation also include not only health practitioners but also health researchers, which interactions were considerably numerous during the pandemic.

6.2.10 UK: Wales

The interviews reflected the challenges caused by COVID-19 pandemic on the interviewees, at both their professional level (given the need of learning new skills) and personal level, since the work against the pandemic ended up affecting personal relationships. One of the interviewees acknowledged long working hours since the pandemic began, a trend of exponential growth in workload that has been generally observed in most of the target countries.

Both interviewees' job is not directly related to the health service, even though one of them is engaged in assisting the vulnerable population at the local level, in her city council. The interviews still show the uncertainty around risks when coordinating volunteers to help vulnerable populations or managing financial and human resources effectively and in the shortest possible time.

One of the main organizational changes in the Welsh administration has been the digitalization of its functions. Through online procedures for citizen services, the Welsh local administration continued to function and remain open to the public during the pandemic. In the same vein, one of the interviewees stated that the scrutiny mechanism for holding executive offices to account was also maintained, although these meetings were held remotely. A good practice in this regard is that these accountability meetings were streamed directly, recorded, and available online to the public. However, although online administrative processes enabled the local government to maintain service provision, another interviewee lamented that "everything was through a computer" and not everyone, especially older people, had access to a computer and therefore to these telematic services.

In terms of the implementation of public policies related to COVID-19 and specifically to the provision of social services, one interviewee states that in the research site all domiciliary care available was used. According to the interviewee, around 20% was provided by the Council and 80% by private contractors outside. This could be considered an indicator of complementarity and public-private collaboration in emergency management.

The same interviewee also highlighted the active participation and involvement of citizens in the implementation of measures to address the pandemic, working as volunteers in the provision of social

services. This is certainly an example of local crisis management initiatives from a bottom-up approach.

Interaction between stakeholders

Both interviewees agreed there was strict collaboration and cooperation between the different political levels, especially between the national and Welsh authorities. According to one of them, there was fluent communication between health workers and local coordinators that work with vulnerable populations. The other interviewee stated that the management of funds for health has been an important area of intergovernmental interaction through vertical collaboration. A large transfer of funds was made from the UK government to the Welsh government to support measures to combat the virus. Although there are admittedly political differences between the two authorities, this is nevertheless an example of the extent to which these interactions took place during the emergency.

The COVID-19 crisis forced necessary intergovernmental coordination. The City Council and the national health authority were forced to work together and build formal and informal channels of communication to cope with the pandemic, especially in the provision of social services.

From the governance point of view, one of the interviewees shared a positive opinion on how stakeholders have interacted during the pandemic. The system, in general, worked well and it is positively evaluated. On the other hand, the system allowed local communities to provide chemists to vulnerable groups, even if some situation of collapse ended up happening.

In terms of communication strategy, one of the interviewees argued that the Welsh government's management of the pandemic was used by the government itself to communicate to the public that the Welsh authorities were managing the health crisis differently from the UK (England) and Scottish governments, to differentiate themselves, and not to be seen as part of the overall management of the emergency.

6.3 Next steps and recommendations for follow up interviews for next iteration of government analysis

As COVID-19 is an ever-evolving threat, governmental structures and European communities strive to tailor their responses based on contributing factors and unique or shared characteristics among the European countries. As anticipated, a known limitation of the study is that despite the relatively homogenous research sample, some participants could not respond extensively or as in depth as other participants on certain research questions due to their different role, capacity, responsibilities, or tasks on their working environment in relation to the fight against the pandemic. Therefore, the next iteration could cover a variety of gaps whilst examining on a deeper level the intragovernmental relationships on a horizontal level such as the cooperation between ministries and other agencies, organizations, and companies in order to identify whether and to what degree the common phenomenon of overlapping responsibilities can be beneficial or hinder stakeholders from an operational perspective, communication and the vaccination campaign.

Moreover, it is recommended that the next iteration should examine interagency communication as well as the impact of newly established institutions had on the “normal” operation of governmental entities. It is recommended to include the previously mentioned considerations and potentially conduct a comparison on a national, regional, and local level. Enhanced civil-governmental cooperation could also be examined, particularly on countries that have a more decentralized

structure. A cross-country comparison could illustrate how these relationships differ on countries that have a top-down centralized approach and structure in comparison to more decentralized structure with more bottom-up elements. Concluding, communication has been highlighted as a crucial element from a variety of stakeholders. The next iteration is recommended to shed additional light and emphasis on communication and how can it be tailored to address, mitigate, and counter the common phenomena of non-abidance to containment guidelines, fake news circulation and anti-vax movement initiatives which may result in violent protests and even in orchestrated violence against healthcare experts and pharmaceutical facilities.

7 Economic and social welfare responses to COVID-19

This chapter focuses on desk-based research about economic and social welfare response to COVID-19 across the EU and target countries.

7.1 Summary of economic response to COVID-19 across the EU

As a part of the EU coordinated COVID-19 response, the President Ursula von der Leyen has established a coronavirus response team[73] consisting of three main pillars, including one devoted to the economy looking in-depth at various business sectors, such as tourism or transport, and trade, as well as value chains and macro-economy. To date, €3.7 trillion has been allocated to the EU's coordinated economic response, their percentage distribution by type of expenditure is shown in Figure 1.

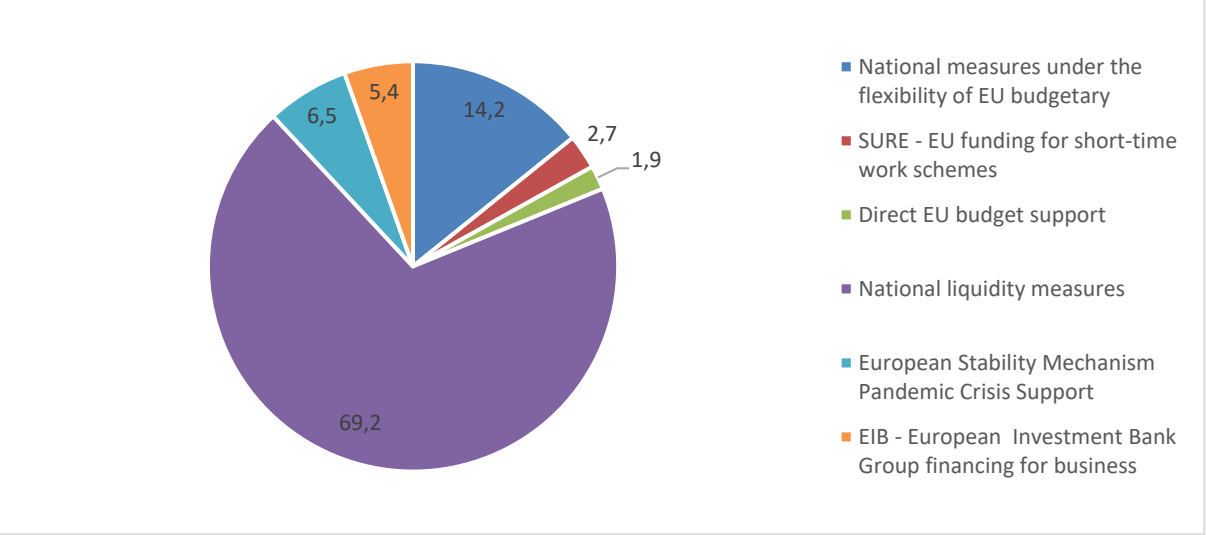

Figure 1. EU's coordinated economic response, % composition.

Source: https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic_en (accessed on 29/12/2021).

Among the main lines of action undertaken to counter the negative effects of the pandemic on the economy (in addition to Member States' budgetary and liquidity measures) there were also initiatives aimed at the following:

[73] European Commission. *European Commission's coronavirus response team.* https://ec.europa.eu/info/european-commissions-coronavirus-response-team_en (access 06/01/2022)

- **Supporting business and securing jobs**. The temporary Support to mitigate Unemployment Risks in an Emergency (SURE)[74] is one of the main instruments adopted by the EU to protect citizens and help Member States to mitigate the negative socio-economic consequences of the coronavirus outbreak on their territory. SURE can provide financial assistance up to €100 billion in the form of EU loans to affected Member States to cope with sudden increases in public expenditure to maintain employment. In particular, SURE acts as a second line of defence, supporting short-time working schemes and similar measures to help Member States protect jobs, and thus employees and the self-employed from the risk of unemployment and loss of income. Loans provided to Member States under the SURE instrument are supported by a system of voluntary guarantees from Member States; indeed, the establishment of SURE is a further tangible expression of EU solidarity.
- **Protecting small and medium-sized businesses**. The Commission is in close contact with national authorities, industry representatives and other stakeholders to monitor and assess the impact on European industries and trade. Indeed, the economic impact of the coronavirus crisis has been different for industries and businesses depending on several factors, such as the ability to adapt to supply chain disruptions. In 2021, the European Commission conducted a survey and roundtable with the aim of better understanding and sharing what measures Member States were planning and implementing to address the challenges SMEs faced during and after the COVID-19 crisis. The results of the consultation process were summarised in a report.[75] The analysis showed that there is no "silver bullet", but that the COVID-19 crisis required the deployment of a wide range of instruments.
- **Initiatives to support the economy.** Among these initiatives, Regulation 2021/241 of the European Parliament and of the Council of 12 February 2021 established the Recovery and Resilience Facility (RRF, the "Facility").[76] The funding coming from the EU's long-term budget combined with NextGenerationEU (NGEU)[77], the temporary instrument designed to foster recovery, will be the largest stimulus package ever financed in the EU and will help rebuild societies and economies in pursuit of the goal of a greener, more digital, and more resilient Europe. The aim of the Recovery and Resilience Facility is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient, and better prepared for the challenges and opportunities of the green and digital transitions. The "Facility" is structured around six pillars: green transition; digital transformation; economic cohesion, productivity, and competitiveness; social and territorial cohesion; health, economic, social, and institutional resilience; policies for the next generation. In August 2020, the European Commission established the Recovery and Resilience Task Force (RECOVER) within its Secretariat-General which, together with the Commission's Directorate-General for Economic and Financial Affairs, is tasked with leading the implementation of the Recovery and Resilience Instrument.

[74] https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/financial-assistance-eu/funding-mechanisms-and-facilities/sure_en (access 06/01/2022)

[75] https://ec.europa.eu/growth/system/files/2021-11/SME%20Envoys%20Finance%20-%20Final%20conclusions%20on%20national%20solvency%20measures%20for%20SMEs%20October%202021.pdf (access 28/01/2022)

[76] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0241 (access 06/01/2022)

[77] https://op.europa.eu/en/publication-detail/-/publication/d3e77637-a963-11eb-9585-01aa75ed71a1/language-en (access 06/01/2022)

- **Supporting the recovery of EU tourism.** The tourism ecosystem has been hit hard by the restrictions on movement and travel following the pandemic. To get it back on track, on 13 May 2020, the Commission presented a package of guidelines and recommendations to help Member States safely resume travel and gradually reboot Europe's tourism.[78]
- **Securing essential food supplies.** The European Commission provided support to the most vulnerable population through the European Fund for Aid to the Most Deprived (FEAD).[79] In particular, amendments to the Common Provisions Regulation and the FEAD Regulation were issued in response to the COVID-19 outbreak and increasing needs. These amendments made additional resources available with more than EUR 3.8 billion allocated to the FEAD for the 2014-2020 period. The Commission also supported initiatives in agriculture, including the adoption of guidelines[80] to ensure an efficient supply chain and financial measures to directly support farmers and rural areas.
- **Protecting critical European assets and technology.** The European Commission has published guidelines[81] to ensure a strong EU-wide approach to screening foreign investment at a time of economic vulnerability generated by the pandemic. The aim is to preserve critical EU businesses and assets, particularly in sectors such as health, medical research, biotechnology, and infrastructure that are essential to maintaining security and public order, without compromising the EU's overall openness to foreign investment.

Moreover, the European Commission has undertaken a number of activities to monitor economic and policy changes introduced by the pandemic, among which:

- **Economic forecasts.** On 11 November 2021, the European Commission published its *Autumn 2021 Economic Forecast*[82] , showing that the EU economy is rebounding from the pandemic recession faster than expected. As vaccination campaigns progressed and restrictions started to be lifted, growth resumed in Spring and continued unabated through summer, underpinned by the re-opening of the economy.
- **Economic governance review.** On 19 October 2021, the European Commission adopted a Communication[83] that takes stock of the changed circumstances for economic governance in the aftermath of the coronavirus crisis and relaunches the public debate on the review of the EU's economic governance framework.

Overall, economic response to the pandemic in EU countries was carried out in a coordinated manner at the national and at the European level. This joint and coordinated policy response seems to have been successful, as the impact of the COVID-19 crisis on economic and social distress has been much less severe than expected. At a European level, the timely use of existing flexibilities and the creation of new instruments were both essential to mitigate the socio-economic consequences of the pandemic. As part of its strategy, the European Commission activated for the first time the general escape clause of the Stability and Growth Pact with a consequent relaxation of budgetary rules that

[78] https://ec.europa.eu/commission/presscorner/detail/en/ip_20_854 (access 28/01/2022)

[79] https://ec.europa.eu/social/main.jsp?catId=1089 (access 28/01/2022)

[80] https://ec.europa.eu/social/main.jsp?catId=1089 (access 28/01/2022)

[81] https://trade.ec.europa.eu/doclib/docs/2020/march/tradoc_158676.pdf (access 28/01/2022)

[82] https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5883 (access 06/01/2022)

[83] https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-governance-review_en (access 06/01/2022)

allowed Member States to support their welfare systems and economies. Other relevant measures include the agreement on the Temporary Framework for State Aid and the Investment Initiatives for the Response to the Coronavirus (which provided exceptional flexibility to redirect cohesion policy funds where most needed). Among the emergency instruments created to combat the negative effects of the pandemic on the economy and society, SURE has been key in supporting the European labour market. Another main pillar, perhaps the most essential, of the EU's economic response to the pandemic is the RRF.

7.2 Summary of economic response to COVID-19 across target countries

In the EU, the effective use of the large sums foreseen in the Recovery Plan is a huge challenge, as the Next Generation EU funds require to commit resources by the end of 2023 and complete payments by the end of 2026 (European Council, 2020). To this end, Member States have finalised with the Commission their national Recovery and Resilience Plans (RRPs), setting out a detailed reform and investment agenda based on specific guidelines in line with the EU's overall objectives. Therefore, RRPs represent one of the most powerful tools available to EU countries to define actions and interventions to overcome the economic and social impact of the pandemic and to address the environmental, technological, and social challenges of our time by acting on national specificities. EU countries' progress in implementing their RRPs can be monitored through the Recovery and Resilience Scoreboard launched by the Commission on 15 December 2021.

In Switzerland, in spring 2020, the Federal Council approved several packages of measures worth around CHF 60 billion to mitigate the economic consequences of the COVID-19 pandemic.[84] The aim of these measures, which are directed at various target groups, is to safeguard jobs, secure wages and support the self-employed. In the field of culture and sport, measures have also been taken to prevent bankruptcies and to mitigate the financial consequences. In addition, there are provisions to delay payment or temporarily waive interest on arrears of social security contributions and various taxes.

In the UK (England and Wales), the government has been working towards the recovery from the COVID-19 pandemic. Measures considered three main factors: Health, economic and social effects.[85] Guiding principles and factors were informed by science, fairness, proportionality, privacy, and transparency along with fourteen supporting programmes of work that the government will deliver as part of the recovery plan were also outlined. Regarding economic factors, the government issued monetary benefits to people and businesses who were hit by the pandemic.[86]

[84] An overview of the economic measures undertaken by the country is available at this link: https://home.kpmg/xx/en/home/insights/2020/04/switzerland-government-and-institution-measures-in-response-to-covid.html (access 09/01/2022)

[85] UK Government - Cabinet Office. (2020, May 11). *Our plan to rebuild: The UK Government's COVID-19 recovery strategy*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/884760/Our_plan_to_rebuild_The_UK_Government_s_COVID-19_recovery_strategy.pdf. (access 27/05/2021)

[86] Welsh Parliament - Senedd Research. (2020, March 19). *Coronavirus timeline: Welsh and UK governments' response,* https://research.senedd.wales/research-articles/coronavirus-timeline-welsh-and-uk-governments-response/. (access 27/05/2021)

In Israel[87], the Bank of Israel launched a programme to purchase government and corporate bonds, lowered the policy rate from 0.25% to 0.1% and established a credit facility for small and medium enterprises (SMEs) via banks. It also injected liquidity and reduced the capital adequacy ratio for banks by 1 percentage point. Banks were encouraged to allow a postponement of mortgage and other household credit repayments. Loan funds with state guarantees for small and large firms were established. SMEs were supported in different ways, as described in the next section.

7.3 Summary of social welfare response to COVID-19 across EU and target countries

Social welfare responses to COVID-19 considered a wide range of issues, ranging from measures to support employment and especially employment of young people, providing income support for standard and non-standard workers, support low-income households, investing in distance education to ensure inclusion, invest in digital skills and education, and so on.

7.3.1 Gender policies

Gender is a cross-cutting dimension of the compounding crises harming the economy and the well-being of people raised by the pandemic. It has soon been evident that the socio-economic consequences of the pandemic are not gender-neutral but are disproportionally attributed to women. For instance, women account for 70% of the global health workforce and are, therefore, at higher risks of infection. They are more exposed to job and economic insecurity than men and face increased risks of violence and abuse. Moreover, women continue to bear the burden of family care and to do most of the unpaid family work increased by stay-at-home recommendations, quarantine, lockdown periods and school closures (OECD, 2020). In contrast to what happened in the Great Recession (2008-2009), the recession that accompanied the COVID-19 pandemic has often been termed a 'she-cession' (e.g., Bluederon, 2021). The early lockdowns hit hardest traditionally female employment sectors; furthermore, women were also more likely than men to work in part-time and irregular jobs that suffered the greatest negative consequences (e.g., Adams-Prassl et al., 2020; OECD, 2021a). Finally, the additional time required to women for unpaid domestic and care work during the pandemic (including the need to care for children during school closures) reduced the time available to women for paid work (Raile et al., 2020). After the initial shock, women's working hours have rebounded somewhat but many female-dominated jobs have not yet recovered in the same way as male-dominated ones, and many scholars agree that the COVID-19 'she-cession' is a 'mom-cession' with women's employment losses driven in large part by the outcomes of mothers who often took on additional hours of (unpaid) care of their children during school shutdowns (OECD, 2021b). The magnitude of these gender gaps differs across countries partly due to the pre-existing gender disparities in paid and unpaid work and partly due to the nature of governmental responses.

7.3.2 Public policies to support parents

Public policies to support parents were introduced in many countries through the provision of paid or unpaid leave for parents and emergency care for essential workers as well as economic benefits. For example, in Italy the government introduced a number of measures to support families, including the *"Decreto Cura Italia"* (Decree Italy Care), which was later reinforced and extended by the *"Decreto*

[87] https://www.oecd-ilibrary.org/sites/af8f331e-en/index.html?itemId=/content/component/af8f331e-en

Rilancio" (Decree Restart) and the *"Decreto Agosto"* (Decree August). These decrees aim to support working parents through the provision of bonuses for babysitters, the introduction of the right to specific parental leave for children under 12 and the right to telework for working parents in the private and public sectors, as well as sustaining schools by investing in building requirements and adapting educational activities.[88] In Belgium, starting from 1st January 2021, a 15-day paternity leave has been introduced for fathers. The country also adopted a new five-year action plan for children's rights[89], focused on nine objectives (including combating poverty, preventing violence and abuse, facilitating children's participation, protecting the most vulnerable, and training professionals on the rights of the child).

The strategy is focused on six main elements, including integration of policy approaches to protect children's interests, the creation of efficient infrastructure of services for children and families, and an active approach to social inclusion of vulnerable children. Similarly, in December 2020, a draft law[90] has been passed in Germany to strengthen the participation and improve opportunities for children and young people with special needs. Starting from January 2021, additional funding will be made available in Ireland[91] for supporting the inclusion of children with disabilities in early childhood education and care. At the European level, on 11 December 2020, the Ministers of the Employment, Social Policy, Health, and Consumer Affairs Council signed a Joint Declaration[9293] aimed at supporting the EU Commission in its efforts to ensure that the EU and its Member States take firm action against child poverty and strengthen the rights of children, mitigating the impact of the COVID-19 pandemic on children and families at risk of poverty and social exclusion.

7.3.3 Inclusive labour markets

Relevant efforts were made by countries also in the direction of building inclusive labour markets by implementing labour market policies targeted to vulnerable groups. Indeed, the labour market consequences of the COVID-19 pandemic were harshest for groups with disadvantaged employment status already before the pandemic: employment rates and hours worked declined most for low-skilled and poorly educated workers, workers in low-paid occupations, young people, and workers in non-standard jobs, such as part-time, temporary and self-employed workers (OECD, 2021c). Temporary workers were disproportionately affected by the crisis while, from a demographic point of view, low-paid women and younger workers suffered the greatest employment losses during the early, most severe period of the pandemic[94]; also, the share of youth not in employment, education, or training

[88] For more information: https://www.mef.gov.it/en/covid-19/The-measures-introduced-by-the-Italian-government-to-support-families-00001/ (access 06/01/2022)

[89] https://gouvernement.cfwb.be/files/Documents/Gouvernement/20201210_CP%20GFWB.pdf (access 06/01/2022)

[90] https://www.bmfsfj.de/resource/blob/162870/b40d39d11578bee6b9b6d8b5f2d5dc55/kinder-und-jugendstaerkungsgesetz-data.pdf (access 06/01/2022)

[91] https://www.gov.ie/en/press-release/74c5f-minister-ogorman-announces-additional-investment-to-support-children-with-disabilities-in-pre-school-care/ (access 06/01/2022)

[92] https://www.bmfsfj.de/resource/blob/163116/92825af8e669b65f85de0521bbac9ddb/20201211-en-erklaerung-eu-mitgliedstaaten-poverty-armut-data.pdf (access 06/01/2022)

[93] A summary of parents' support measures in EU countries can be found here: https://ec.europa.eu/social/main.jsp?langId=en&catId=1246&furtherNews=yes&newsId=9893 (access 06/01/2022)

[94] Eurofound and European Commission Joint Research Centre (2021), *What just happened? COVID-19 lockdowns and change in the labour market, Publications Office of the European Union*, Luxembourg.

(NEET) increased globally (ILO, 2021a). The hours worked reduced almost everywhere with consequent income losses. According to the International Labour Organization (ILO, 2021b), in 2020 8.8% of global working hours were lost. Although the magnitude of the drop was unprecedented, there was substantial variation between regions and the losses were lower in countries where lockdown measures lasted for shorter periods (ILO, 2021b). Against this backdrop, the COVID-19 crisis has become, in a matter of months, the most severe economic and labour market downturn since the Second World War (ILO, 2021c).

7.3.4 Short-time work schemes

Short-time work schemes have been implemented in all EU countries with the only exception of Malta and Finland[95]; in particular, pre-existing schemes were adapted in several ways: softening eligibility rules and extending coverage to include atypical and self -employment, as well as other sectors not previously covered. Nevertheless, the extent of the support (e.g., wage compensation) varied significantly between countries and the most generous schemes are generally found in countries with the most well-established and solid social protection systems such as Austria, Germany, the Netherlands, France, and Denmark. By contrast, the least generous schemes in the EU are those of Poland and Ireland.[96]

7.3.5 Unemployment benefits

Unemployment benefits have been extended in many countries, by widening coverage for example to workers in atypical employment (France and Spain), or unpaid leave (Israel). Unemployment benefits payment procedures have also been simplified in different countries, including Italy, Spain, Cyprus, Greece, Estonia, Croatia, and Romania. Minimum income schemes or direct cash transfers have also been implemented or extended. For example, Italy provided unconditional access to 'Citizenship Income' as well as an Emergency Income for families hit by the pandemic. In Israel, the government provided direct payments to vulnerable groups including the self-employed, older employees (over 67 years) who lost their employment during the crisis, and families with children. Many different national policies (e.g., short-time work schemes, loans, reallocation of EU funds, deferment of the payment of taxes) have been adopted across the EU to support small and medium-sized enterprises (SMEs). These national policies include extending unemployment benefits to atypical and self-employed workers; setting-up specific funds to support the self-employed (France and Luxembourg), through temporary bridging measures (Belgium and Netherlands) or lump sum payments (Italy and Malta). In Israel, SMEs that have been hit hard by the crisis received subsidies and property tax refunds and payments of VAT and were allowed to postpone payments of social security and government taxes.

7.3.6 Direct job creation

Significant measures have been taken to support employment, including direct job creation: several countries have introduced or modified public works programmes to tackle the crisis (this has also been possible in many EU countries thanks to recovery plans). For example, Austria implemented a large-scale programme to digitise public archives, targeting workers with disabilities. This innovative idea has recently been supported by both the ILO and the World Bank, as it can be replicated in other

[95] The paragraph presents broad overview of labour market policies in responses to Covid-19, based on evidence from European Training Foundation (2021).

[96] The case of Ireland can be considered surprising as the country has a well-established social protection system.

countries with positive spill-over effects since – providing the opportunity to be home-based - these types of jobs can facilitate work-family reconciliation. Measures to facilitate labour mobility were undertaken to address labour shortages resulting from movement restrictions. For example, in Spain, recipients of unemployment benefits and short-time work are also allowed to work in agriculture. In Belgium, asylum seekers have been allowed to work in horticulture and forestry. Germany allowed individuals under short-time work to work as long as their earnings did not exceed their previous income. In UK, the Retrofit Get-in[97] project created green employment for the multi-skilled live events workers who have been made redundant during the COVID-19 pandemic.[98] Employment support has also been provided through financial support to companies, e.g., in Israel grants have been made available to companies for each person rehired. Finally, other measures to support employment were aimed at promoting training, retraining and skills upgrading, such as the provision of financial incentives for companies offering training or for individuals participating in training.

7.4 Next steps and recommendations for follow up interviews for next iteration of government analysis

This chapter has described the different measures implemented in the EU and in target countries to cope with the challenges posed by the COVID-19 pandemic on economic wellbeing of people and organizations. On the one side, both EU and target countries have established economic instruments to support and protect businesses, including funds for businesses and vulnerable groups as well as fund for the pandemic recovery. On the other side, target countries social welfare measures have been established to protects those that became more vulnerable due to the pandemic, including support for families, benefits for unemployed people, and support to ensure labour market continuity, among others. It is difficult to retrieve evidence about these economic and social measures from the empirical research. While different interviewees from several countries have provided some preliminary insights on support provided to workers and families, these are mainly covered under Chapter 5 on addressing vulnerability. Therefore, more in-depth analysis on these topics is required for the next interview round. In particular, questions should specifically address the range of economic and social measures each country has implemented. In addition, different experts ranging from policy makers to social services, economic development, and business could be also involved in the COVINFORM project to have a better perspective of these topics.

8 Socio-political, legal, and ethical factors influencing government preparedness and response

COVID-19 and pandemic response in the EU challenged public health systems, but also revealed some socio-political, legal, and ethical factors that influenced national government actions. Indeed, to respond to the pandemic, governments have enforced the most restrictive measures curtailing citizens' rights since World War II (see COVINFORM report *"D5.1 Baseline report: Public health responses"*). Typically, these measures limited freedom of movement, freedom to exercise economic

[97] https://www.retrofitgetinproject.com/ (access 06/01/2022)

[98] The project also aims at widening the scheme to enable the retrofitting industry to be a default for arts workers in-between contracts.

or commercial activities, and impacted the educational, religious, social, and private sphere of people (Binder et al., 2020). In most countries, pandemic responses contributed to an unequal redistribution of power, with national governments gaining more far-reaching control (Diaz Crego & Kotanidis, 2020) (see Section 5 of the COVINFORM report *"D5.1 Baseline report: Public health responses"*).

This chapter will briefly explore these issues to provide a more comprehensive picture of the socio-political, legal, and ethical factors influencing government preparedness and response in the EU and target countries. The chapter will first provide a cross-country comparison (Section 8.1 and 8.2) based on desk-based insights of the COVINFORM report *"D5.1 Baseline report: Public health responses"*. Then, from Section 3 onwards, it will investigate these topics based on empirical findings in some of the target countries. Findings on these topics from the empirical research are still limited: interviewees did not discuss in depth socio-political, legal, and ethical factors across interviews in all the partner countries. More significant insights emerged just for the following target countries: Austria, Belgium, Italy, Portugal, and Spain. Findings from these countries have therefore been included in this chapter, while there are no relevant findings for Greece, Romania, Sweden, UK England, UK Wales. Finally, the chapter will then make recommendations for the next COVINFORM government analysis interviews (M31, May 2023).

8.1 Exploration of socio-political, legal, and ethical issues in public health emergency preparedness and response

8.1.1 Implementation of restrictive measures

Since the start of the pandemic, governments in all the target countries implemented restrictive measures in relation to e.g., mobility, social life, and transportation. These measures have been essential to limit the spread of the virus and to ensure that the most vulnerable people were protected. However, critiques have also arisen about these measures. According to De Angelis and de Oliveira (2021), these critiques include: "excessive restrictions of fundamental rights, such as the freedom of movement, often without the scientific basis for collectively binding decision-making being known to the public; undue restrictions of access to relevant scientific documents and data; excessive limitations to the freedom of expression and information, assembly, the right to privacy, and due process; lack of a clear legal basis for emergency measures, especially in countries in which regulation of states of emergency is not entrenched at constitutional level; a plethora of legal acts accompanying emergency legislation, making it difficult for citizens and practitioners to orient themselves in the ensuing legal maze" (De Angelis and de Oliveira, 2021, p. 1603). The unintended consequences of these restrictive measures also pose ethical considerations. For example, quarantine and social distancing policies runs the risk of discriminating against specific population groups, including ethnic minorities, homeless people, and asylum-seekers. For example, these restrictive measures pose risks of reduced income and even job loss, disproportionately affecting the most vulnerable and disadvantaged populations (Branicki, 2020; Lewnard and Lo, 2020), including seasonal and temporary workers, street vendors, and informal sector workers.

8.1.2 Surveillance and contact tracing responses

COVID-19 response has involved large-scale contract tracing and surveillance strategies to collect information about viral transmission and epidemiological trends, as well as to ensure compliance with restrictions. The need for surveillance and contact tracing, while justified for epidemiological purposes, has also fuelled discussions about the limitation in citizens' rights (van Kolfschooten and de Ruijter,

2020) and the use of private information and data (Lucivero et al., 2020). Questions arise, indeed, when a public health threat justifies restrictions of personal freedom, with national and local governments implementing measures that were previously considered unimaginable in Western/European countries, such as using drones to monitor physical distancing or mobile phones to track people's movements (Manacourt et al., 2020) (see COVINFORM *"D5.1 Baseline report: Public health responses"*). As Surber (2021) argues, these measures run the risk of infringing the human right to privacy and paving the way for further digital monitoring and surveillance.

For example, since the vaccination rollout began in most of the EU countries, national governments released an immunity certification for the people who are vaccinated. An immunity certification like the EU Digital COVID Certificate Regulation[99], or namely, the 'Green Pass', entered into application in the EU on 01st July 2021. This certification is given to people who have received, from an approved pharmaceutical company, the COVID-19 vaccine. People must show their 'Green Pass' to access specific services, including transportation, workplaces and public areas. The implementation of the 'Green Pass' varies from country to country. While this certification is a necessary surveillance measure to avoid the spread of the virus, it also raises several practical, legal, and ethical concerns. In some countries, people without vaccination are not granted access to specific places, services, or activities; in turn, this might increase the discrimination between people and foster tensions between different groups (Phelan, 2020; Coccia, 2021). In addition, members of traditionally discriminated or marginalized groups might face more barriers in accessing services (Voo et al., 2021). Meanwhile, private organizations may use immunity certification at their full discretion in a way that is not fair and consistent with governmental policies (Voo et al., 2021).

The use of drones as a surveillance tool during pandemic times also poses further problems. Drones have been used (for example in Italy and France), to monitor whether people comply to imposed restrictive measures such as social distancing, social gathering ban, or curfew (Baudouin, 2021). However, drones can arouse suspicion among individuals when used for surveillance purposes, as well as complaints about privacy rights (Baudouin, 2021).

8.1.3 COVID-19 alert and warning systems

COVID-19 rates fluctuate over time; therefore, the EU have tried to find ways to quickly alert the population about the virus' threat level (see Section 6.2 of COVINFORM *"D5.1 Baseline report: Public health responses"*). In 2020, the ECDC in Stockholm published a traffic light system[100] covering regions in the EU's 27 member states. The EU President Ursula von der Leyen stated that this initiative was an attempt to provide a common EU approach for a warning system and to replace the patchwork of each EU member state determining risk zones at its own discretion. Notwithstanding this, this traffic light system was criticized. For example, in October 2020, Austria's EU minister, Karoline Edtstadler, found the new criteria inaccurate, noting that "most regions in Europe are red", and adding that "We have to be able to assess the risk better and also maintain freedom of movement and goods at the same time."[101].

[99] https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/eu-digital-covid-certificate_en (access 15/01/2022)

[100] This website is not active anymore.

[101] https://www.dw.com/en/coronavirus-what-the-eus-new-traffic-light-system-means/a-55265476 (access 15/01/2022)

8.2 Cross-country comparison of evidenced consideration to issues identified in government preparedness and response

8.2.1 Implementation of restrictive measures

In the target countries, the constitutional frameworks, which restrictive measures have been taken, differ significantly across countries (Grogan, 2020). While some countries' constitutions include provisions to declare a state of emergency or to entrust extraordinary powers to specific institutions (e.g., Israel, Italy, or Romania), others (such as Belgium and the UK, including England and Wales) do not (see COVINFORM *"D5.1 Baseline report: Public health responses"*). In Italy, the state of emergency was declared in response to COVID-19 on the 31st of January 2020. This state of emergency (still in place in January 2022) gives larger powers to the central government. According to Malandrino and Demichelis (2020), this results in uncertainty around the allocation of decision-making powers across the national and the local governments and the exercise of administrative tasks by public authorities. In addition, this might reproduce conflicts across policy makers at different government levels (Malandrino and Demichelis, 2020). In this way, the state of emergency detaches emergency actions from possible checks of constitutional powers; it also allows for largely discretionary executive decisions and does not ensure the legal liability of higher public servants that strongly depends on political majorities (De Angelis and de Oliveira, 2021).

In Israel, a state of emergency is in place since the foundation of the country. Therefore, the first national lockdown (March 2020) was legally anchored to the state of emergency. This was then replaced by the Coronavirus Law[102], formally known as Law Granting Government Special Authorities to Combat Novel Coronavirus, enacted on 23 July 2020 (Gross and Kosti, 2021). This Coronavirus Law allowed the Israeli government to declare a state of emergency for threats to public health such as the COVID-19 pandemic. The Coronavirus Law granted the government executive law-making powers that are like those granted in the state of emergency, acting as a potential source of restriction of rights for citizens (Gross and Kosti, 2021).

In Romania, the state of emergency was declared on 16 March 2020. With the worsening employment situation in the EU due to the pandemic, millions of Romanian expats working abroad had no alternative than to return in the country (Poenaru, 2021). However, given the restrictive measures, returning expats were forced to wait on long queues at borders, as they were believed to be a threat of viral transmission (Poenaru, 2021). Once in Romania, returning expats have been stigmatized for being now unemployed and likely to be living off state allowance. In addition, restrictive measures such as the lockdown led to militarization and authoritarianism as distinctive modus operandi of the state to monitor citizens (Poenaru, 2021).

In Portugal, the state of emergency was declared on 19 March 2020. It was the first since the country transitioned from a dictatorship to a democracy in 1974 (Santos Rutschman, 2020). This declaration allowed Portuguese authorities to partially curtail several fundamental rights, including travel, social and religious gatherings, and strike. Elderly people aged 70 and over were placed under a special duty

[102] Library of Congress, (29 July 2020), Israel: Law Granting Government Special Authorities to Combat Novel Coronavirus Adopted, https://www.loc.gov/item/global-legal-monitor/2020-07-29/israel-law-granting-government-special-authorities-to-combat-novel-coronavirus-adopted/#:~:text=Top%20Recent%20Articles-,Israel%3A%20Law%20Granting%20Government%20Special%20Authorities%20to%20Combat%20Novel%20Coronavirus,effect%20until%20June%2030%2C%202021 (access 15/01/2022)

of home isolation, which some commentators criticized as stigmatizing and was later dropped. Non-essential economic activities were shut down unless they were deemed essential, and the right of workers in health care and other critical areas to strike was also suspended temporarily (Santos Rutschman, 2020).

In Spain, the declaration of the state of emergency revealed the fragility of the coalition government and intensified the polarization of Spanish politics (Royo, 2020). On the one side, this declaration was used to criticize the government. The Basque and Catalan parties, some members of those parties that have supported the election of Pedro Sánchez as Prime Minister, accused him of using the crisis to make a centralizing power grab (Royo, 2020). On the other side, the government was unable to reach an agreement on economic measures for pandemic response (Royo, 2020).

8.2.2 Surveillance and contact tracing responses

Across target countries, COVID-19 responses have involved large-scale contract tracing and surveillance strategies (such as precision location trackers, high-resolution smart cameras, and drones) to collect information about viral transmission and epidemiological trends, as well as to ensure compliance with restrictions (see COVINFORM *"D5.1 Baseline report: Public health responses"*). The use of these surveillance strategies under a state of emergency and exceptional rules raised ethical and legal concerns on data usage, protection, and privacy rights (Oliveira Martins et al., 2021). A large-scale qualitative study conducted between 6 April and 6 May 2020 aimed at exploring concerns on public health measures among residents in nine European countries (including target countries Austria, Belgium, France, Germany, Ireland, Italy, Switzerland, and the UK) (Lucivero et al., 2021). Out of 349 interviews, the topic of digital contact tracing arose in 282, with interviewees raising strong concerns on the use of tracing apps by governments or other powerful actors to reinforce digital surveillance structures. On this regard, interviewees perceived the use of COVID-19 apps as posing an increased threat in terms of loss of privacy and heightened control. It must be said that these stances are expressed by using very strongly evocative tropes, conveying a sense of fear and danger through references to 'surveillance', 'Big Brother', 'witch hunts', 'Chinese practices/state', 'living like in a prison', or people being 'programmed' (Lucivero et al., 2021). A study conducted on 27 UK residents participating in six focus groups carried out between 1-12 May 2020 aimed at exploring concern over the contact tracing app of the UK National Health System (Williams et al., 2021). Across interviewees, the most common concern was over data privacy and security. Interviewees indeed expressed a reluctance to have their data accessed by government or health authorities, and associated contact tracing with increased surveillance by governments. Another commonly expressed concern was over the stigmatizing potential of the app. This was related to a lack of privacy and the misconception that the app would enable people to use the app to identify others that have or have had COVID-19 (Williams et al., 2021).

In terms of drone-related issues, a study conducted with a Twitter semantic analysis methodology analyses the changes between April and December 2020 into people perceptions about the use of drones as a surveillance tool in Italy (Garzia et al., 2021). In the early phase of the pandemic, positive sentiments when seeing the drones ranged between Joy (23%), Anticipation (24%), Attraction (5%) and Surprise (16%), with negative sentiments such as Fear (11%), Sadness (9%), Anger (8%) and Disgust (4%) having relatively low percentage. However, in the last phase of the analysis, negative sentiments about the use of drones replaced the positive ones, with Fear (12%) Sadness (20%) Anger (29%) and

Disgust (18%) overcoming positive sentiments such as Joy (4%), Anticipation (9%), Attraction (1%) and Surprise (8%) (Garzia et al., 2021).

8.2.3 COVID-19 alert and warning systems

In the target countries, most of these warning systems are based on the reproduction of COVID-19 numbers/infection rates and use colour codes, often similar to a traffic light schemes, to indicate the level of risk. Warning systems often include a scheme based on five (e.g., Spain, England, Ireland) and four colours (e.g., Austria, Greece, Israel, Italy, Portugal, Romania), which are often also used to distinguish between the differing local epidemiological situations within countries (Shendruk and Quito, 2021). These systems were designed to increase transparency about the evolution of the pandemic and associated measures; however, they have also created confusion and frustration (see Section 6.2 of COVINFORM *"D5.1 Baseline report: Public health responses"*).

In Italy, the traffic light raised critiques on the uncertainty related to the indicators and the risk assessment process that are being used to determine the colour of each region. As an example, the administration of the Abruzzo Region, which was on a red risk level until 5 December 2020, decided to unilaterally self-declare on an orange risk level despite the Italian government not allowing the shift until 12 December 2020 (Paroni et al., 2021). The uncertainty related to a lack of clarity on how the newly designated coronavirus "red zones" were decided upon (The Local, 2020) became a political issue. Indeed, in November 2020 the right-wing opposition party Lega accused the Italian government of imposing lockdown in regions run by the opposition while going easy on those regions run by the government coalition (The Local, 2020) (see Section 6.2 of COVINFORM *"D5.1 Baseline report: Public health responses"*).

8.3 Cross-country comparison of socio-political, legal, and ethical factors influencing government preparedness and response based on empirical findings

8.3.1 Austria

Implementation of restrictive measures

According to one of the interviewees, restrictive measures were required in Austria as appealing to people's responsibility was not enough. As the interviewee reported, in the first phase of the pandemic, people complied to these restrictive measures. However, the decision-making around these measures challenged the democratic system of the country, that requires consultation with interest groups and stakeholders before implementing a measure. Therefore, the pandemic measures were implemented in a way that the interviewee judged as often formally incorrect or contradicting existing laws. The interviewee also mentioned that some of these measures strongly impacted personal freedom in private spaces. Accordingly, a debate arose around the establishment of political processes to check and correct these laws, but as consequence, citizens did not trust the government anymore and the overall compliance fell.

8.3.2 Belgium

Surveillance and contact tracing responses

Interviewees revealed some issues with contact tracing in the country. One of the interviewees mentioned and described four main issues. First, diverse groups have been greatly disadvantaged by

the impossibility to track them. For example, it is difficult to contact trace low-skilled, temporary, and seasonal workers, in particular those working in industries with a large turnover such as meat processing and construction. In this situation, the employees are left in a very weak position as they cannot oppose this. Second, contact tracing apps rely on technology, however not all people have enough digital skills to use them or understand what these are useful for. Third, there have been cases of people that got traced or resulted as COVID-19 positive in the app; they were contacted several times by different people and organizations of the public health system. According to the interviewee, this reveals a lack of coordination across public health systems that in turns has effects on the life of people. Fourth, as there is a resource overload for the public health system, there is limited time to contact people by phone, who got alerted by the tracing app. These people are therefore simply sent text messages; however, the interviewee considers this approach as far less effective in ensuring contacts comply with quarantine role compared to a conversation over the phone or seeing people in person.

8.3.3 Italy

Implementation of restrictive measures

Interviewees revealed that in Italy citizens did not trust the government as a consequence of the implemented restrictive measures. For example, one of the interviewees revealed that after an initial time when citizens enthusiastically considered public health workers as heroes, citizens started to be suspicious and sometimes openly criticize the government measures. As reported by one of the interviewees, citizens also had doubts about the decisions and work of the Scientific Technical Committee. Indeed, several decisions to secure essential devices (e.g., ventilation helmets) were made on an emergency basis and outside of normal legislation standards. These decisions were strictly necessary to ensure public health, but some of these choices have raised doubts and in some cases distrust among the public.

Surveillance and contact tracing responses

Another interviewee provided an example of issues in using the contact tracing apps. The interviewee mentioned the case of public health workers who got notified by the contact tracing app, as being a close contact or required to quarantine. These workers doubted that the contacted people provided truthful information and thought that many of these health care workers continued to go to work. According to the interviewee, this issue was little seen or considered in policymaking, and its epidemiological implications are unclear.

8.3.4 Portugal

Implementation of restrictive measures

One of the interviewees recognized that people perceived the restrictive measures as “unbalanced” and “overcorrected exaggerations” which resulted in protests. These measures also had impacts on workers, in particularly those with no regular contracts, that lost their job and “the day after confinement they ended up on the street, lost their room where they also had no contract”. For example, in the analysis by Almeida and Santos (2020) of official job employment data, from the 4th quarter of 2019 to the 1st quarter of 2020, 83,500 people in Portugal moved from employment to unemployment status and 180,800 from employment to inactivity status. Accordingly, since the start of the pandemic, there has been a gradual reduction in the employed population with a sharp drop in

April and May 2020. The highest unemployment rates occurred in the Centre region and in the tourist region of Algarve. In the latter, the tourism and hotel sector has been the main affected by the pandemic, with thousands temporary and seasonal tourism-related jobs being lost (Almeida and Santos, 2020).

8.3.5 Spain

Implementation of restrictive measures

One of the interviewees mentioned that legal debates emerged about the declaration of the state of emergency in the country in March 2020. Indeed, in July 2021 the Constitutional Court has declared the state of emergency as unconstitutional, as it would have required previous approval by the parliament.[103] However, the interviewee mentioned that the Spanish Constitution defines what the States of Alarm, Exception and Siege are and when they would be accurate to apply. Therefore, no more legal tools were needed to respond to the pandemic than those attached to the State of Alarm. The interviewee recognized that there may be a legal debate, but also stressed that in terms of general wellbeing the State of Alarm was better suited to manage the pandemic.

8.4 Next steps and recommendations for follow up interviews for next iteration of government analysis

This chapter has described the socio-political, ethical, and legal factors influencing government preparedness and response in the target countries. Based on a preliminary analysis provided in the report COVINFORM *"D5.1 Baseline report: Public health responses"* and supported by evidence in literature on the target countries, it has been found that the implementation of restrictive measures, the surveillance and contact tracing responses, and the COVID-19 alert, and warning systems pose ethical and legal challenges in terms of trust from citizens, restriction of human rights, privacy, and discrimination. Insights from empirical findings in the target countries seem to confirm these challenges, in particular concerning issues related to the use of contact tracing apps. However, it is worthwhile noting that the empirical study did not find relevant information on this topic for all the target countries, therefore for the next iteration further analysis would be required.

Indeed, a more targeted analysis is necessary for gaining a deeper understanding of the investigated topics from research participants in the target countries. In particular, for the follow up interviews for the next iteration of government analysis into WP4 due in M31 (May 2023), it is recommended to explore the pandemic measures also by understanding the controversies and unintended consequences that the implemented restrictive measures, contact tracing technologies, and alert and warning systems created in terms of surveillance and legal functioning of the target countries' governments and public health systems. In addition, it would be relevant to analyse what national governments and their public health systems have done to minimize these controversies and unintended consequences from a socio-demographic, ethical, and legal point of view.

[103] https://english.elpais.com/spain/2021-07-14/spains-top-court-rules-that-the-coronavirus-state-of-alarm-was-unconstitutional.html (access 15/01/2022)

9 Summary and conclusions

This report analysed and assessed different dimensions of government response to the COVID-19 pandemic in the EU and target countries. The report relied on both primary data collected through interviews with experts and stakeholders in specific research sites in the target countries, and secondary data. The report highlighted the variegated approaches each target country has employed to deal with the pandemic and revealed their related challenges and opportunities.

In Chapter 4, focusing on government planning and preparedness to COVID-19, findings demonstrated that each target country followed its own response path, based on both pre-existing and newly developed strategies. The intensity and length of the pandemic was not expected by national governments; therefore, each country established a central authority in charge and new bodies, task forces or working groups that included often public health experts to provide advice for policy- and decision-making. However, final decisions have been taken under the responsibility of central governments and often caused confusion amongst both the population and actors involved in pandemic management. The action of the established bodies or task forces has been mostly considered as very positive, with experts both supporting governments in providing knowledge and recommendations and taking leadership roles. Conversely, findings also demonstrate that pre-existing crisis management plans in each target country were insufficient.

In Chapter 5, focusing on governmental approaches to defining and addressing vulnerability to COVID-19, governments in target countries have identified vulnerabilities based on different variables related to e.g., health, cultural, economic, and social factors. Those perceived to be more vulnerable were elderly people, people who did not speak the national language, migrants and asylum seekers, single-parent families, or workers in certain businesses. However, the definition of vulnerability changed with the time, when governments realized that also young and healthy groups, experienced vulnerability. Approaches to vulnerability have been diversified. Some countries mainly defined and targeted vulnerable groups by providing financial, psychological, or housing support, while others did not employ a tailored approach. Findings revealed that vulnerability is a condition that varies across individuals and groups based on their sociodemographic characteristics. Therefore, vulnerability is not just a condition related to the pandemic; instead, the pandemic exacerbated pre-existing vulnerabilities and touched upon longstanding everyday challenges. Notwithstanding some positive experiences across the countries, local communities and vulnerable groups had levels of distrust towards governments. In addition, higher government levels do not always engage with other government levels and with local communities, so understanding local needs is challenging for them.

In Chapter 6, focusing on responses on multiple levels of governance, governmental structures and European communities strive to tailor their responses based on contributing factors and unique or shared characteristics among the European countries. As anticipated, a known limitation of the study is that despite the relatively homogenous research sample, some participants could not respond extensively or as in depth as other participants on certain research questions due to their different role, capacity, responsibilities, or tasks on their working environment in relation to the fight against the pandemic. Therefore, the next iteration could cover a variety of gaps whilst examining on a deeper level the intragovernmental relationships on a horizontal level such as the cooperation between ministries and other agencies, organizations, and companies. This would allow the identification of whether and to what degree the common phenomenon of overlapping responsibilities can be

beneficial or hinder stakeholders from an operational perspective, communication, and the vaccination campaign.

In Chapter 7, focusing on economic and social measures, findings have highlighted the different measures implemented in the EU and in target countries to cope with the challenges posed by the COVID-19 pandemic on economic wellbeing of people and organizations. Target countries have established economic instruments to support and protect businesses, including funds for businesses and vulnerable groups as well as funds for the pandemic recovery. In addition, target countries have also developed and implemented social welfare measures for vulnerable groups, including in particular support for families, benefits for unemployed people, and support to ensure labour market continuity. It is difficult to retrieve evidence about these economic and social measures from the empirical research. Empirical research, therefore, will deepen more these topics in the next iteration round and will include interviewees with specific expertise.

In Chapter 8, focusing on socio-political, ethical, and legal factors influencing government preparedness and response in the target countries, findings reported that ethical and legal challenges existed with the implementation of restrictive measures, the surveillance and contact tracing responses, as well as the COVID-19 alert and warning systems. Indeed, these measures run the risk of creating discrimination between people (e.g., those who have or not have been vaccinated), or creating distrust among citizens, as well as of restricting human (e.g., denying access to some places) and privacy rights (e.g., with drones). In the target countries, these challenges mainly emerge in using contact tracing apps.

As mentioned in the Method (Section 2), it is worthwhile stressing that empirical research has been conducted in a specific research site within each target country. While it is difficult to generalize empirical findings from each research site to the whole target country, they provide initial information and insights for a better understanding of trends and patterns of government response to the pandemic. Based on these findings, useful recommendations can be also made for the next activities in COVINFORM project activities, including resident interviews and interviews with experts to be conducted in those countries where reaching the required numbers of interviews has been difficult.

In terms of government planning and preparedness, it is recommended to continue empirical research with main actors from the public sector and experts from different fields of relevance for the project, in particularly in light of existing and (if any) new COVID-19 variants. In terms of vulnerability, it is recommended to explore how governments understood vulnerability across different pandemic timelines and related agendas, as well as how they perceived main pre-existing vulnerabilities and the limited trust citizens had into government actions. In terms of multi-level governance, it is recommended to investigate the cooperation and communication across government levels as well as between governments and other stakeholders including civil society too. In terms of economic and social welfare response, an appropriate set of questions should be able to unpack the different dimensions of this response in the target countries, also involving different experts (e.g., social services, economic policy and development, and business) in the empirical research. In terms of socio-political, ethical, and legal factors, it is recommended to explore the pandemic measures also by understanding the unintended consequences of the implemented restrictive measures, contact tracing technologies, and alert and warning systems, and the actions governments put in place to minimize them.

References

Project deliverables

COVINFORM *"D1.4 Ethical Framework, in strict compliance with the highest ethical principles and fundamental rights".*

COVINFORM *"D2.1 Database containing different data sources"*.

COVINFORM *"D3.2: Multi-site research design and methodological framework".*

COVINFORM *"D4.1 Baseline report: Governmental responses"*.

COVINFORM "*D5.1 Baseline report: Public health responses".*

Literature

Adams-Prassl, A., Boneva, T., Golin, M., & Rauh, C. (2020). Inequality in the impact of the coronavirus shock: Evidence from real time surveys. *Journal of Public Economics*, *189*, 104245.

Alba, C. & Navarro, C. (2003) Twenty-five years of democratic local government in Spain. In: Kersting N., Vetter A. (eds) Reforming Local Government in Europe. Urban and Research International, vol 4. VS Verlag für Sozialwissenschaften, Wiesbaden. https://doi.org/10.1007/978-3-663-11258-7_10

Almeida, F., & Santos, J. D. (2020). The effects of COVID-19 on job security and unemployment in Portugal. *International Journal of Sociology and Social Policy*.

Armocida, B., Formenti, B., Ussai, S., Palestra, F., & Missoni, E. (2020). The Italian health system and the Covid-19 challenge. The Lancet, 5, E253. https://doi.org/10.1016/S2468-2667(20)30074-8

Baudouin, L. (2021). Overview of the French and European Regulations on Aerial Drones (Tema Central), *FORO: Revista de Derecho*, 35, 73-90.

Belgium.de. (n.d.). The structure of the Federal State and the power levels. Retrieved May 27, 2021, from https://www.belgium.be/en/about_belgium/government/federale_staat/structure

Binder, K., Crego, M.D., Eckert, G., Kotanidis, S., Manko, R. & Del Monte, M. (2020). States of emergency in response to the coronavirus crisis: Situation in certain Member States. European Parliament. Retrieved May 26, 2021, from https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649408/EPRS_BRI(2020)649408_EN.pdf

Bluedorn, J., Caselli, F., Hansen, N. J., Shibata, I., & Tavares, M. M. (2021). *Gender and Employment in the COVID-19 Recession: Evidence on "She-cessions"* (No. 2021/095). International Monetary Fund.

Bonomi Bezzo, F., Silva, L., & Van Ham, M. (2021). The combined effect of Covid-19 and neighbourhood deprivation on two dimensions of subjective well-being: Empirical evidence from England. *PloS one*, 16(7), e0255156.

Branicki, L. J. (2020). COVID-19, ethics of care and feminist crisis management. *Gender, Work & Organization*, *27*(5), 872-883.

Brzyska, J., & Szamrej-Baran, I. (2021). Covid-19 Economic Vulnerability Index: EU Evidence. *Procedia Computer Science*, 192, 3551-3559.

Bundesministerium Soziales, Gesundheit, Pflege, und Konsumentenschutz. (2021). Coronavirus Taskforce. Retrieved May 27,2021, from https://www.sozialministerium.at/Informationen-zum-Coronavirus/Neuartiges-Coronavirus-(2019-nCov)/Coronavirus---Taskforce.html

Bundestag (2020). Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite. Retrieved 27 May, 2021 from https://wipolex.wipo.int/en/legislation/details/19754

Bundministerium Inneres. (n.d.). Krisen- und Katastrophenmanagement. Retrieved May 27, 2021, from https://www.bmi.gv.at/204/skkm/start.aspx

Cerami, C., Canevelli, M., Santi, G. C., Galandra, C., Dodich, A., Cappa, S. F., ... & Crespi, C. (2021). Identifying frail populations for disease risk prediction and intervention planning in the Covid-9 era: A focus on social isolation and vulnerability. *Frontiers in Psychiatry*, 12.

Chamber of Deputies. (n.d). Constitution of Romania. Retrieved May 26 2021 from http://www.cdep.ro/pls/dic/site.page?id=339&idl=2

Coccia, M. (2021). The Relation Between COVID-19 Vaccination, Economic Development and Political Systems, and Sociopolitical Implications of Vaccine Passport. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3975426

Committee of the Regions (2016). Cyprus, Introduction. Retrieved 23 March 2021, from

https://portal.cor.europa.eu/divisionpowers/Pages/Cyprus-Introduction.aspx

Confederation Suisse. (n.d.). The Federal Assembly. Available at: https://www.eda.admin.ch/aboutswitzerland/en/home/politik/uebersicht/bundesversammlung.html

Council of Europe (2020). European Committee on Democracy and Governance and COVID-19. Retrieved 23 March 2021, from https://www.coe.int/en/web/good-governance/cddg-and-covid#{%2264787140%22:[4]}

Council of Europe. (n.d.). European Committee on Democracy and Governance and COVID-19: Greece. Retrieved May 26, 2021 from https://www.coe.int/en/web/good-governance/cddg-and-covid#{%2264787140%22:[10]}

Cunningham P. (2020). Cabinet sets up sub-committee on coronavirus. RTE NEWS. https://www.rte.ie/news/2020/0303/1119831-cabinet-meeting/

Daras, K., Alexiou, A., Rose, T. C., Buchan, I., Taylor-Robinson, D., & Barr, B. (2021). How does vulnerability to COVID-19 vary between communities in England? Developing a Small Area Vulnerability Index (SAVI). *J Epidemiol Community Health*.

De Angelis, G., & de Oliveira, E. (2021). COVID-19 and the "state of exception": assessing institutional resilience in consolidated democracies–a comparative analysis of Italy and Portugal. *Democratization*, *28*(8), 1602-1621.

Di Gessa, G., & Price, D. (2021). Changes in health and social well-being in the COVID-19 clinically vulnerable older English population during the pandemic. *J Epidemiol Community Health*.

Diaz Crego, M., & Kotanidis, S. (2020). *States of emergency in response to the coronavirus crisis: Normative response and parliamentary oversight in EU Member States during the first wave of the pandemic*. European Parliamentary Research Service. https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_STU(2020)659385

De Standaard. (2020, April 6). Tien experts moeten België uit lockdown leiden. Retrieved May 27, 2021, from https://www.standaard.be/cnt/dmf20200406_04914854

Eichenauer, V. & Sturm, J.-E. (2020). Die wirtschaftspolitischen Maßnahmen der Schweiz zu Beginn der COVID-19-Pandemie. Perspektiven der Wirtschaftspolitik, 21(3), 290-300.

Eliseo, A. & Colino, C. (2014). "Multilevel Structures, Coordination and Partisan Politics in Spanish Intergovernmental Relations." Comparative European Politics 12(4–5): 444–67

European Movement Ireland. (2022, February). Irish General Election, February 2020. Retrieved May

27,2021 from https://www.europeanmovement.ie/irish-general-election-february-2020/

European Training Foundation (2021). Mapping innovative practices in the field of active labour market policies during the Covid-19 crisis, https://www.etf.europa.eu/sites/default/files/2021-10/almps_innovative_practices_during_covid-19_0.pdf (accessed on 06/01/2022)

Garzia, F., Borghini, F., Lombardi, M., Gallone, A., & Ramalingam, S. (2021). Emotional analysis of safeness and risk perception of drones during the COVID-19 pandemic in Italy. https://uhra.herts.ac.uk/bitstream/handle/2299/25251/IEEE_ICCST2021_paper_32.pdf?sequence=1&isAllowed=y

Government offices of Sweden - Ministry of Finance. (2021, January 20). Robust financial support for businesses affected by closure. Retrieved May 27, 2021, from https://www.government.se/press-releases/2021/01/robust-financial-support-for-businesses-affected-by-closure/

Government offices of Sweden - Ministry of Justice. (2020, March 13). Ordinance on a prohibition

against holding public gatherings and events. Retrieved May 27, 2021, from https://www.government.se/articles/2020/03/ordinance-on-a-prohibition-against-holding-public-gatherings-and-events/

Governul Romaniei. (n.d.). REGULAMENT din 13 ianuarie 2005. Available at http://legislatie.just.ro/Public/DetaliiDocumentAfis/58731

Grogan, J. (2020). States of emergency: analysing global use of emergency powers in response to COVID-19. *European Journal of Law Reform*, *22*(4) 338-354.

Gross A., Kosti, N. (2021). The Paradox of Israel's Coronavirus Law, *Verfassungsblog. On matters constitutional,* https://verfassungsblog.de/the-paradox-of-israels-coronavirus-law/

Hadden, C. & Ittoo, M. (2020). UK government coronavirus decision making: key phases. Institute for Government. https://www.instituteforgovernment.org.uk/explainers/uk-government-coronavirus-decision-making-phases

Hellenic Parliament. (n.d.). The Constitution. Retrieved May 27, 2021, from https://www.hellenicparliament.gr/en/Vouli-ton-Ellinon/To-Politevma/Syntagma/

Hellenic Republic. (n.d.). Legislation On Covid-19. Retrieved May 27, 2021, from https://covid19.gov.gr/nomothesia-gia-ton-covid-19/

International Monetary Fund. (n.d.). Policy Responses to Covid-19. Country: Greece. Retrieved May 26, 2021 from https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#G

ILO (2021a). COVID-19 and the ASEAN labour market: Impact and policy response. https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/briefingnote/wcms_816432.pdf (accessed on 06/01/2022)

ILO (2021b). COVID-19 and the world of work. Seventh edition Updated estimates and analysis https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_767028.pdf

ILO (2021c). National employment policies for an inclusive, job-rich recovery from the COVID-19 crisis. Policy Brief available at: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_756676.pdf

Karel, R. (2020) Hoe het Coronavirus onze bevoegdheidsverdeling op de proef stelt. Retrieved May 27, 2021, from here

Lewnard, J. A., & Lo, N. C. (2020). Scientific and ethical basis for social-distancing interventions against COVID-19. *The Lancet infectious diseases*, *20*(6), 631-633.

Lucivero, F., Hallowell, N., Johnson, S., Prainsack, B., Samuel, G., & Sharon, T. (2020). COVID-19 and contact tracing apps: Ethical challenges for a social experiment on a global scale. *Journal of bioethical inquiry*, *17*(4), 835-839.

Lucivero, F., Marelli, L., Hangel, N., Zimmermann, B. M., Prainsack, B., Galasso, I., ... & Van Hoyweghen, I. (2021). Normative positions towards COVID-19 contact-tracing apps: findings from a large-scale qualitative study in nine European countries. *Critical Public Health*, 1-14.

Malandrino, A., & Demichelis, E. (2020). Conflict in decision making and variation in public administration outcomes in Italy during the COVID-19 crisis. *European Policy Analysis*, *6*(2), 138-146.

Manancourt, V., Delcker, J., Scott, M., & Cerulus, L. (2020, March 24). *In fight against coronavirus, governments embrace surveillance*. POLITICO. https://www.politico.eu/article/coroanvirus-covid19-surveillance-data/

Navarro-Font, X., Kales, S. N., Vicente-Herrero, M. T., Rueda-Garrido, J. C., Del Campo, M. T., Reinoso-Barbero, L., & Fernandez-Montero, A. (2021). Association Between the "COVID-19 Occupational Vulnerability Index" and COVID-19 Severity and Sequelae Among Hospital Employees. *Journal of Occupational and Environmental Medicine*, 63(10), 895.

OECD (2020). *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, Paris.

OECD (2021a). *Towards gender-inclusive recovery*. OECD Publishing, Paris, https://doi.org/10.1787/ab597807-en.

OECD (2021b). Caregiving in crisis: gender inequality in paid and unpaid work during Covid-19. OECD Policy Response to Coronavirus, 13 December 2021 available at: https://www.oecd.org/coronavirus/policy-responses/caregiving-in-crisis-gender-inequality-in-paid-and-unpaid-work-during-covid-19-3555d164/ (accessed on 06/01/2022)

OECD (2021c), OECD Employment Outlook 2021, OECD Publishing, Paris, https://doi.org/10.1787/5a700c4b-en (accessed on 06/02/2022)

Oliveira Martins, B., Lavallée, C., & Silkoset, A. (2021). Drone Use for COVID-19 Related Problems: Techno-solutionism and its Societal Implications. *Global Policy*.

Paroni, L., D'Apice, C., Ussai, S., Armocida, B., Formenti, B., De Min, L., & Missoni, E. (2021). The Traffic Light Approach: Indicators and Algorithms to Identify Covid-19 Epidemic Risk Across Italian Regions. *Frontiers in Public Health*, *9*.

Petridou, E., Zahariadis, N., & Ceccoli, S. (2020). Averting institutional disasters? Drawing lessons from China to inform the Cypriot response to the COVID-19 pandemic. European Policy Analysis, 6(2), 318-327. doi: 10.1002/epa2.1090

Phelan, A. L. (2020). COVID-19 immunity passports and vaccination certificates: scientific, equitable, and legal challenges. *The Lancet*, *395*(10237), 1595-1598.

Pistoi, S. (2021). Examining the role of the Italian COVID-19 scientific committee. Available at: https://www.nature.com/articles/d43978-021-00015-8?fbclid=IwAR3oI9YALbsXH-px1ePQllVlY33EtILhQeRTSYq9eAkKUgiuVHowjvqP5IY

Poenaru, F. (2021). COVID-19 in Romania—the militarization of social life and the banality of death. *Dialectical Anthropology*, 1-13.

Presidencia del Gobierno. (n.d.). Estadio de Alarma. Retrieved May 26 2021 from

https://www.lamoncloa.gob.es/covid-19/Paginas/estado-de-alarma.aspx#:~:text=El%20primer%20estado%20de%20alarma,provocada%20por%20el%20COVID%2D19

Prime Minister's Office, 10 Downing Street, Cabinet Office, Department of Health and Social Care, Foreign & Commonwealth Office, HM Treasury, Department for Business, Energy & Industrial Strategy, and The Rt Hon Boris Johnson MP. (2020). New government structures to coordinate response to coronavirus. Retrieved May 26, 2021 from https://www.gov.uk/government/news/new-government-structures-to-coordinate-response-to-coronavirus

Public Health Order. (2020). Israel ¨Contagious disease act¨ for COVID-19. Retrieved May,26, 2021 from https://www.nevo.co.il/law_html/law01/502_230.htm

Raile A.N.W., Raile E.D., Parker D.C.W., Shanahan E.A. & Haines P. (2020). Women and the weight of a pandemic: A survey of four Western US states early in the Coronavirus outbreak. *Gender Work Organi*zation, 1–12. https://doi.org/10.1111/gwao.12590

Raposo, V. L., & Violante, T. (2021). Access to Health Care by Migrants with Precarious Status During a Health Crisis: Some Insights from Portugal. Human Rights Review, 1-24.

Republic of Austria. (2020, September 25). Änderung des Epidemiegesetzes 1950, des Tuberkulosegesetzes und des COVID-19-Maßnahmengesetzes (NR: GP XXVII IA 826/A AB 370 S. 51. BR: AB 10408 S. 912.). Retrieved May 27, 2021, from https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2020_I_104/BGBLA_2020_I_104.pdfsig

Republic of Ireland - Department of the Taoiseach; Department of Health. (2020, June 18). Roadmap

for reopening society and business. Retrieved May 27, 2021, from https://www.gov.ie/en/news/58bc8b-taoiseach-announces-roadmap-for-reopening-society-and-business-and-u/

Republic of Ireland. (2020, September 15). COVID-19 Resilience and Recovery 2021 - The Path Ahead. Retrieved April 21, 2021, from https://www.gov.ie/en/campaigns/resilience-recovery-2020-2021-plan-for-living-with-COVID-19/

Republik Österreich. (1950). Epidemiegesetz. Bundesgesetzblatt für die Republik Österreich. Retrieved May 27, 2021, from https://www.ris.bka.gv.at/Dokumente/BgblPdf/1950_186_0/1950_186_0.pdf

Retrieved March 2, 2021, from https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/vulnerablegroupsguidance/

Royo, S. (2020). Responding to COVID-19: The Case of Spain. *European Policy Analysis*, *6*(2), 180-190.

Santos Rutschman, A. (2020). Portugal's Response to COVID-19. *The Regulatory Review*.

Sanfelici, M. (2020). The Italian response to COVID-19 crisis: Lessons Learned and future direction in Social Development. The International Journal of Community and Social Development, 2(2), 191-210. https://doi.org/10.1177/2516602620936037

Shendruk, A., & Quito, A. (2021, April 23). *These are the colorful and confusing Covid-19 alerts used around the world*. Quartz. https://qz.com/1996422/the-differences-between-color-coded-covid-19-warnings-globally/

Simon, J., Helter, T. M., White, R. G., van der Boor, C., & Łaszewska, A. (2021). Impacts of the Covid-19 lockdown and relevant vulnerabilities on capability well-being, mental health and social support: an Austrian survey study. *BMC public health*, 21(1), 1-12.

Sinclair, D. R., Maharani, A., Stow, D., Welsh, C. E., & Matthews, F. E. (2021). Can vaccination roll-out be more equitable if population risk is taken into account?. *PloS one*, 16(11), e0259990.

Surber, R. S. (2020). Corona pan (dem) ic: gateway to global surveillance. *Ethics and Information Technology*, 1-10.

Swedish Library of Congress. (2021, July 16). Sweden: Law Giving Municipalities Authority over Bars and Restaurants Not Complying with COVID-19 Measures Enters into Force. Retrieved May 27, 2021, from https://www.loc.gov/law/foreign-news/article/sweden-law-giving-municipalities-authority-over-bars-and-restaurants-not-complying-with-COVID-19-measures-enters-into-force/

Swiss National Covid-19 Science Task Force. (n.d.). We identify, analyse and advise. Retrieved May 29, 2021, from https://sciencetaskforce.ch/

The Federal Government. (n.d.) Structure and Tasks. Retrieved May 27, 2021, from https://www.bundesregierung.de/breg-en/federal-government/structure-and-tasks-470508

The Knesset. (2020). Knesset passes "major corona law" granting the Government special powers for dealing with the pandemic. Retrieved May 26, 2021, from https://m.knesset.gov.il/en/news/pressreleases/pages/press23720s.aspx

The Local. (2020, November 5). 'It doesn't add up': Anger rises in Italy over new coronavirus red zones. *The Local Italy*. https://www.thelocal.it/20201105/it-doesnt-add-up-anger-in-italy-over-new-coronavirus-red-zones/

The World Bank Group. (2020, April 13). Governance. Retrieved May 27,2021, from https://www.worldbank.org/en/topic/governance/overview

The World Bank Group. (2020, March 31). Governance and Institutions Emergency Measures for State Continuity during COVID-19 Pandemic. Retrieved May 27, 2021, from https://pubdocs.worldbank.org/en/333281587038822754/Governance-and-Institutions-during-COVID.pdf

Toi Staff. (2020, May). Government approves new security cabinet, ministerial committee for coronavirus. Times of Israel. Retrieved May 27, 2021, from https://www.timesofisrael.com/government-approves-new-security-cabinet-ministerial-committee-for-coronavirus/

UK Cabinet Office. (2013). Local resilience forums: contact details. Retrieved May 26, 2021, from https://www.gov.uk/guidance/local-resilience-forums-contact-details

UK Cabinet Office. (2013). Preparation and planning for emergencies: responsibilities of responder agencies and other. Retrieved May 26, 2021 from https://www.gov.uk/guidance/preparation-and-planning-for-emergencies-responsibilities-of-responder-agencies-and-others

UK Cabinet Office. (2013). Preparing for Pandemic Influenza. Retrieved May 26, 2021 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/225869/Pandemic_Influenza_LRF_Guidance.pdf

UK Cabinet Office. (2020). Government announces roadmap taskforces. Retrieved May 26, 2021 from https://www.gov.uk/government/news/government-announces-roadmap-taskforces

UK Parliament. (n.d.). Parliamentary constituencies. Retrieved May 26, 2021 from https://www.parliament.uk/about/how/elections-and-voting/constituencies/

van Kolfschooten, H., & de Ruijter, A. (2020). COVID-19 and privacy in the European Union: A legal perspective on contact tracing. *Contemporary Security Policy*, *41*(3), 478-491.

Voo, T. C., Reis, A. A., Thomé, B., Ho, C. W., Tam, C. C., Kelly-Cirino, C., ... & Munsaka, S. (2021). Immunity certification for COVID-19: ethical considerations. *Bulletin of the World Health Organization*, *99*(2), 155.

Williams, S. N., Armitage, C. J., Tampe, T., & Dienes, K. (2021). Public attitudes towards COVID-19 contact tracing apps: A UK-based focus group study. *Health Expectations*, *24*(2), 377-385.

Annexes

Information sheet

About the COVINFORM project

Policymakers and public health experts unanimously recognise the disproportionate impacts of COVID-19 on vulnerable persons: even in countries with well-developed responses, the outbreak and its repercussions imperil the basic well-being of social groups whose livelihoods are already precarious, while the uneven distribution of suffering threatens to aggravate inequality and division. One complicating factor here is the intersectional nature of health and socioeconomic vulnerabilities.

Another aspect is the complexity of risk in contemporary socioecological systems. The COVINFORM project will draw upon intersectionality theory (which in the COVINFORM case contemplates how different elements, which on their own might not be cause given situations, when combined may well result to cause such situations) and complex systems analysis (based on the observation of different elements of a same system whose interaction may be determined by a series of variable elements) in an interdisciplinary critique of COVID-19 responses on the levels of government, public health, community, and information and communications. The project will conduct research on three levels: 1) on an EU27 MS plus UK level, quantitative secondary data will be analysed and models will be developed; 2) Within 15 target countries, documentary sources on the national level and in at least one local community per country will be analysed; 3) in 10 target communities, primary empirical research will be conducted, utilising both classical and innovative quantitative and qualitative methods (e.g. visual ethnography, participatory ethnography, and automated analysis of short video testimonials). Promising practices will be evaluated in target communities through case studies spanning diverse disciplines (social epidemiology, the economics of unpaid labour, the sociology of migration, etc.) and vulnerable populations (COVID-19 patients, precarious families, migrating health care workers, etc.). The project will culminate in the development of an online portal and visual toolkit for stakeholders in government, public health, and civil society integrating data streams, indices and indicators, maps, models, primary research and case study findings, empirically grounded policy guidance, and creative assessment tools.

About the COVINFORM methodology

COVINFORM is a research project based on the interaction with individuals belonging to various categories and involved at different levels. The main actors involved, besides the Partner organizations and their staff, are:

- external professionals/stakeholders who are asked to provide expertise/opinions;
- research participants involved in the implementation of case studies asked to provide information and feedback about their experience with the COVID-19 pandemic. The main focus is on vulnerable groups which may be represented by – only as non-exhaustive examples – medical staff and their families, members of migrant communities

Needless to say, but essential to underline, is that all participants will be strictly voluntary and that no persons (such as children) who cannot give their free and willing consent, will be enrolled.

The main instruments to reach the goals of the project are:

- the implementation of case studies, each with a specific focus on one given area or target group;
- the networking activities between stakeholders which would contribute to the project's scopes (e.g. meetings, workshops etc.);

The COVINFORM project is developed above all through the inputs from different sources (the case studies, the expertise of partners and expert opinions). These inputs (among which personal data) are collected through the use of questionnaires, surveys or interviews, ethnography, and other methods of empirical social research.

The personal data is collected and stored in compliance with the General Data Protection Regulation (GDPR).

COVINFORM will not collect data revealing even partially racial or ethnic origin, political opinions, religious or philosophical beliefs, religious, party or trade union membership, data concerning health, genetic code, addictions or sexual life, details of convictions, decisions on punishment and fines and other decisions issued in court or administrative proceedings. (*)

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(*) The abovementioned elements at the time of writing are not included in the data which the researchers expect to collect. Gaps in the research are being identified while the full definition of the case studies, target groups, research methods and questions are still in the development phase. Should any of the mentioned categories of data be considered all ethics implications and requirements to be complied with will be assessed and the information sheet shall by likewise modified.

It might occur that, for the scopes of the project, the stored personal data may be transferred to and from non-EU countries, in compliance with GDPR and relevant legislation. This possibility is indicated in the informed consent form. E-mail addresses may be visible to all recipients of mails sent out to more than one address.

Personal data collected during the COVINFORM project will be destroyed when the scopes of COVINFORM project comes to an end, even if this should survive the formal end of the project, and in any case no longer than 2 years from the end of the project.

About the [case study / research activity]

[To be filled out by the COVINFORM partner responsible with details on scope, methods and duration. Risks and benefits of involvement in the case study must be listed]

[…]

Data Controller (person or institution): […] **(**)**

Contacts of Data Controller

Name: […]

Surname: […]

Function/role: […]

Email: […]

Phone: […]

Contacts of Data Processor (if applicable)

Name: […]

Surname: […]

Function/role: […]

E-mail: […]

Phone: […]

Contacts of Data Protection Officer

Name: […]

Surname: […]

Email: […]

Phone: […]

The **supervisory Authority** with which you can file a complaint is: […]

If you have any further questions considering any aspect of COVINFORM project and the processing of personal data gathered, please send an e-mail to the following address […]

You have the right to access personal data, rectify, delete and revoke your consent, including the request for any information regarding the processing of personal data at any time. To exercise these rights, please send an email to the following email address specifying your request: […].

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(**) Description of figures involved in the protection of personal data

Controller *is the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for his/her/its nomination may be provided for by Union or Member State law.*

Processor *is a natural or legal person, public authority, agency or other body which processes personal data on behalf of the Controller.*

A ***Data Protection Officer (DPO)*** *appointment by the Controller and Processor will be mandatory when processing: is carried out by a public authority; consists of operations which require regular and systematic monitoring of data subjects on a large scale; consists of operations which require processing of "sensitive data" on a large scale or of special categories of data or data relating to criminal convictions and offences. The Data Protection Officer shall be designated on the basis of professional qualities and, in particular, expert knowledge of data protection law and practices and the ability to fulfil the tasks of the DPO.*

The DPO may be a staff member of the Controller or Processor, or fulfil the tasks on the basis of a service contract. The Controller or the Processor shall publish the contact details of the DPO and communicate

them to the Supervisory authority. The DPO must report directly to the highest level of management and must not carry out any other tasks that could results in a conflict of interest.

*The **Supervisory Authority/Data Protection Authority** is the public authority responsible for monitoring the application of the General Data Protection Regulation (GDPR) in order to protect the fundamental rights and freedoms of natural persons in relation to processing and to facilitate the free flow of personal data within the Union.*

PARTNER would like to invite you to participate in the COVINFORM research and innovation project, coordinated by SYNYO GmbH and funded by the European Commission under Horizon 2020 grant No. 101016247. Your contribution is valuable: via this project, your voice and opinions will be heard by policymakers at the national and EU levels. The information sheet covers the various levels of participation. Many workshops or events are audio and/or video recorded as is now common practice.

Your participation is voluntary, your identity will be protected, and you may withdraw at any time.

This information sheet explains the project, what your participation might involve, and how it might contribute to the research. Please read this carefully and feel free to ask any questions.

What is this study about?	▪ COVINFORM is a three-year EU-funded project about the socio-economic effects of the COVID-19 pandemic and pandemic response on the level of government, public health, community, and communication and (mis-)information. ▪ The project seeks to find out: 1) how the COVID-19 pandemic and measures responding to it have affected members of different groups; 2) how human behaviour, social dynamic, physical and mental health have been affected; 3) how such impacts can be counteracted and how communication and measures could be designed in a more inclusive way.
How can I participate?	▪ The project team would like to conduct [add method, e.g. interview] with you, lasting between [add time] (or longer, if you prefer), and covering the above topics.
Do I have to participate?	▪ **NO** – participation is fully voluntary, and you can stop the interview at any time. ▪ If you choose to participate, you can decide which questions to answer and which not to. ▪ Your decision to participate or not is entirely yours, and will result in no negative consequences for you or your community. ▪ Your decision to participate or not is unconnected to any special privileges, such as the right to aid or support. ***If you require access to medical or psychological aid, women's or***

	children's services, or legal support, the project team can refer you to organizations that may be able to help you – regardless of whether you participate in the research.
What will happen during the interview?	▪ Only information necessary to the research aims will be collected. ▪ You can refuse to answer any questions without any negative consequences for you or your community. ▪ If you consent to it, the [method] will be [audio / video] recorded and the interviewer will take notes. ▪ The recording will be transcribed (written down) and translated into English; after transcription, the recording itself will be deleted.
Will my identity or the identities of people I know be made public?	▪ **NO** – the only record of your identity kept by the project team after your interview will be your consent document, which will not be shared. ▪ The consent document will contain an ID code; throughout the project, you will only be referred to using this code. ▪ Any personally identifiable information about you or anyone else will be deleted from your interview transcript ("anonymisation") or replaced with a code ("pseudonymisation"); communications and other records containing your personal information will be permanently deleted immediately following your interview. ▪ The consent document will be the only source linking your ID code with your identity; it will be kept in a locked file cabinet by [partner] and will not be copied or transferred.
What will happen to my data?	▪ Your **anonymised or pseudonymised** data will be uploaded to a secure server maintained by [partner], and interpreted by researchers at the partner institutions (please see the attached sheet "Project partners" for details). ▪ The team will create **anonymised** reports and material for the European Commission and other organizations such as universities and other research organizations, national governments, public health stakeholders, health and welfare organizations, etc. ▪ After the project is complete, **your personally identifiable data will be permanently deleted.** ▪ Your **fully anonymised or pseudonymised** data may be kept for continued research and made available on open data platforms (such as the European Commission-affiliated

	platform Zenodo: https://about.zenodo.org/) for use by other researchers, as permitted by relevant laws.
Who might see my data?	▪ Only the project partner conducting the [method] will see your personally identifiable data. That is the researcher and his/her colleagues directly involved in the project. ▪ Governmental organizations will not have access to your personally identifiable data. ▪ [for research with migrants] If you share information about crimes or violent acts, the project team **may be required** to pass on this information to authorities, as determined by the laws in your country. **You will be informed by the researchers of this eventuality before you start the interview so that you can confirm to have correctly understood this.**
Are there any advantages to participating?	▪ There are **no immediate personal advantages** to participating. ▪ However, the project team will do their best to make your voices and opinions heard by policymakers at the local, national, and European levels. ▪ The project team want to make sure that governments in particular are aware of the diverse perspectives and needs of different vulnerable groups, and hope that the project will inspire more humane, equitable, effective, and democratic pandemic response, communication strategies, and future pandemic preparedness.
Are there any risks to participating?	▪ As with any data, there is a very small risk that your transcript and other data will be leaked or shared inappropriately. ▪ However, because this data will be anonymised or pseudonymised, there is hardly any risk that it could be traced back to you.
Can I change my mind about participating?	▪ **YES** – before the [method], you can ask questions about the research and change your mind, even if you have already signed the consent form. ▪ During the [method], you can stop at any time; you can also choose which questions to answer. ▪ After the [method], you can get in touch with the researchers and ask that your data be deleted; such a request will be confidential.

	▪ None of these actions will result in any negative consequences for you.
Do I have additional rights?	▪ **YES** – you can request more information at any time about how your data is stored and used. ▪ You can request access to or rectification of your data, request its transfer to you or another person, or impose restrictions on who can see or use it. ▪ You can ask questions about the research process, conclusions, or any other aspects of the project. ▪ Finally, you can lodge complaints with competent authorities with no threat of negative consequences (please see the attached sheet "Requests and complaints"). ▪ The legal basis for the data collection and processing conducted during this project is the European General Data Protection Regulation, 2016/679.
Who is in charge of the study and how can I reach them?	▪ The project is coordinated by Diotima Bertel of SYNYO GmbH (diotima.bertel@synyo.com / +43 699 18 940 011 / Otto-Bauer-Gasse 5/14, Vienna, Austria). ▪ The partner in charge of data collection and processing in [country] is [partner/address/phone/email].

Project partners

Only the organization conducting your interview will have access to your personally identifiable data.

The following consortium partners may have access to your **anonymised or pseudonymised** data (e.g. transcripts from which your name has been removed):

1. SYNYO GmbH
2. Magen David Adom in Israel
3. Samur Proteccion Civil
4. Universita Cattolica Del Sacro Cuore
5. Sinus Markt- und Sozialforschung GmbH
6. Trilateral Research
7. Kentro Meleton Asfaleias
8. Factor Social Consultoria em Psicossociologia e Ambiente LDA.
9. Österreichisches Rotes Kreuz (Austrian Red Cross)
10. Media Diversity Institute
11. Societatea Nationala de Cruce Rosie din Romania (Romanian Red Cross)
12. University of Antwerp

13. Sapienza Univeristy of Rome
14. Rey Juan Carlos University
15. Swansea University
16. Gotenborg University

Incidental findings

If you share information about crimes or violent acts, the project team **may be required** to pass on this information to authorities, as determined by the laws in the country in which the interview is conducted.

The following are examples of crimes or violent acts that **may require disclosure**:

1. XX

The following are examples of data and actions that **will not be disclosed**:

2. XX

In [country], the legal basis for this requirement is [national law].

Requests and complaints

You can request more information at any time about how your data is stored and used. You can request access to or rectification of your data, request its transfer to you or another person, or impose restrictions on who can see or use it. You can also ask questions about the research process, conclusions, or any other aspects of the project. In case of requests to the project team, please use this form to indicate your requests to the project team:

I would like more information about the project	☐
I would like more information about how my data is stored and used	☐
I would like access to my data	☐
I would like to rectify my data	☐
I would like to lodge a complaint with competent authorities	☐

Please provide some details here, if needed: …

You can also lodge complaints about the project with competent authorities with no threat of negative consequences: for instance, complaints about the way you were treated by the researchers or other project team members, the way the research procedures were explained, the way your data was collected, etc. In [country], the competent authority is [authority]. **In case of complaints, please contact** [authority] **at:**

[contact info]

Informed consent form

This is a consent form regarding participation in the COVINFORM project. By signing this form, you are also confirming that you have read and understood the Information Sheet and that you have been given the chance to ask any questions.

☐ I confirm that I am 18 years old or older.

☐ I confirm that I was fully informed about the scope of COVINFORM project and about the collection and processing of personal data, of my rights to access my personal data, rectify, delete and withdraw consent, including the possibility to request any information regarding the processing of this data at any time and on how to exercise these rights.

☐ I confirm that I was fully informed of the case study (or event, or survey) […] which I have been invited to participate and that I am participating freely under no pressure or constraint and that I am free to withdraw at any time providing no explanation.

☐ I agree to provide my personal contact information, such as name, contact information (e.g. mailing address, e-mail address, telephone number, professional information and affiliation).

☐ I accept to participate in workshops or to be contacted by email or telephone for inputs, observations, recommendations, regarding my specific professional field and the COVINFORM project.

☐ I accept to be administered evaluation questionnaires as practitioners for inputs, observations and recommendations with a focus on my specific professional field and that the data contained in the filled-out forms may be used for the scopes of the project and related dissemination.

☐ I accept that it might occur that, for the scopes of the project, the stored personal data may be transferred to and from non-EU countries, in compliance with GDPR and relevant legislation.

☐ I accept that photographic or video footage and/or vocal recordings may be acquired during the workshops and used only for project activities and related dissemination and that I have been offered the possibility to opt out from the present clause.

☐ I accept that my pseudonymised transcripts may be shared and that I may be quoted verbatim.

Additional notes (e.g. indicate eventual opt out from photographic/video/audio clause):

Name of person giving consent (data subject)…… Date ___/___/_____

e-mail (or phone) of person giving consent …….

Signature: ……

Name of person administering the information sheet and consent form ……

Date ___/___/_____

Signature: ……