

Springer Geography

Radomir Bolgov · Vadim Atnashev ·  
Yury Gladkiy · Art Leete · Alexey Tsyb ·  
Sergey Pogodin · Andrei Znamenski *Editors*

# Proceedings of Topical Issues in International Political Geography

 Springer

# Springer Geography

## Advisory Editors

Mitja Brilly, Faculty of Civil and Geodetic Engineering, University of Ljubljana, Ljubljana, Slovenia

Richard A. Davis, Department of Geology, School of Geosciences, University of South Florida, Tampa, FL, USA

Nancy Hoalst-Pullen, Department of Geography and Anthropology, Kennesaw State University, Kennesaw, GA, USA

Michael Leitner, Department of Geography and Anthropology, Louisiana State University, Baton Rouge, LA, USA

Mark W. Patterson, Department of Geography and Anthropology, Kennesaw State University, Kennesaw, GA, USA

Márton Veress, Department of Physical Geography, University of West Hungary, Szombathely, Hungary

The Springer Geography series seeks to publish a broad portfolio of scientific books, aiming at researchers, students, and everyone interested in geographical research.

The series includes peer-reviewed monographs, edited volumes, textbooks, and conference proceedings. It covers the major topics in geography and geographical sciences including, but not limited to; Economic Geography, Landscape and Urban Planning, Urban Geography, Physical Geography and Environmental Geography.

**Springer Geography—now indexed in Scopus**

Radomir Bolgov · Vadim Atnashev · Yury Gladkiy ·  
Art Leete · Alexey Tsyb · Sergey Pogodin ·  
Andrei Znamenski  
Editors

# Proceedings of Topical Issues in International Political Geography

 Springer

*Editors*

Radomir Bolgov  
St. Petersburg State University  
St Petersburg, Russia

Yury Gladkiy  
Herzen State Pedagogical University  
of Russia  
St. Petersburg, Russia

Alexey Tsyb  
Peter the Great St. Petersburg Polytechnic  
University  
St. Petersburg, Russia

Andrei Znamenski  
University of Memphis  
Memphis, TN, USA

Vadim Atnashev  
St. Petersburg State University  
St. Petersburg, Russia

North West Institute of Management  
RANEP  
St. Petersburg, Russia

Art Leete  
University of Tartu  
Tartu, Estonia

Sergey Pogodin  
Peter the Great St. Petersburg Polytechnic  
University  
St. Petersburg, Russia

ISSN 2194-315X

Springer Geography

ISBN 978-3-031-20619-1

<https://doi.org/10.1007/978-3-031-20620-7>

ISSN 2194-3168 (electronic)

ISBN 978-3-031-20620-7 (eBook)

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2023

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG  
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

# Organization

## TIPG 2021 Program Committee

Sergey Pogodin (Chair)	Peter the Great St. Petersburg Polytechnic University, Russia
Mustafa Altunok	Bolu Abant Izzet Baysal University, Turkey
Hamza Ateş	Istanbul Medeniyet University, Turkey
Vadim Atnashev	North-West Institute of Management, RANEP and St. Petersburg State University, Russia
Ivan Arjona-Pelado	Foundation for the Improvement of Life, Culture and Society, Spain
Amneh Badran	Al Quds University, Palestine
Zeynab Bakhturidse	Peter the Great St. Petersburg Polytechnic University, Russia
Nadezhda Bogdanova	Peter the Great St. Petersburg Polytechnic University, Russia
Radomir Bolgov	St. Petersburg State University, Russia
Elena Boldyreva	Peter the Great St. Petersburg Polytechnic University, Russia
Adolfo Calatrava-García	Carlos III University, Spain
Dmitriy Gdalin	Herzen State Pedagogical University of Russia, Saint-Petersburg, Russia
Yuri Gladkiy	Herzen State Pedagogical University of Russia, Saint-Petersburg, Russia
Alexander Dawoody	Marywood University, USA
Konstantin Eidemiller	Saint-Petersburg State University, Russia
Vladimir Fokin	St. Petersburg State University, Russia
Rovshan Gatamov	Baku State University, Azerbaijan
İsmail Güllü	Karamanoğlu Mehmetbey University, Turkey
Wolfgang Holtkamp	Universität Stuttgart, Germany
Anar Iskenderov	Baku State University, Azerbaijan

Li Jingcheng	Peter the Great St. Petersburg Polytechnic University, Russia-China
Wang Juntao	Peter the Great St. Petersburg Polytechnic University, Russia-China
Bárbara Elena Karell-Furé	University of Havana, Cuba
Viktor Kirilenko	North-West Institute of Management, RANEP, Russia
Gabriele Kötschau	Wirtschaftskooperationen West-Ost, Hamburg, Germany
Svetlana Kornekova	St. Petersburg State University of Economics, Russia
Ekaterina Kuchumova	Peter the Great St. Petersburg Polytechnic University, Russia
Vadim Musaev	Saint-Petersburg Institute of History at Russian Academy of Sciences, Russia
Sunyoung Park	Sejong University, Republic of Korea
Ingeborg Pardon	Institut Dialogica, Berlin, Germany
Sofia Pereswetoff-Morath	Stockholm University, Sweden
Anna Riabova	Peter the Great St. Petersburg Polytechnic University, Russia
Francisco Javier Ruiz-Martínez	Carlos III University and Alicante University, Spain
Andrey Rusakovich	Belarusian State University, Republic of Belarus
Marina Sablina	Peter the Great St. Petersburg Polytechnic University, Russia
Eduardas Spiriajevas	Klaipėda University, Lithuania
Abulfez Suleymanov	Üsküdar University, Turkey
Vyacheslav Sukhorukov	Herzen Herzen State Pedagogical University of Russia, Saint-Petersburg, Russia
Alexey Tsyb	Peter the Great St. Petersburg Polytechnic University, Sociological Institute of the Russian Academy of Science, Russia
Natalia Vasilieva	St. Petersburg State University, Russia
Thomas Wallgren	Helsinki University, Finland
Xu Xing	Nankai University, China
Yang Xuewei	Tus-Holdings, China

# Preface

This volume contains the papers submitted (and accepted for publication) to the International Conference “Topical Issues of International Political Geography” (TIPG-2021). This proceedings book addresses the main issues of contemporary political geography and international relations, providing a platform for discussion and collaboration of experts in the fields of Political Geography, Geopolitics, International Relations, etc. Participants from all over the world consider the controversies and challenges posed by globalization, focusing, in particular, on the ideologies of globalization and regionalism, migration crises, prevention of ethnic conflicts, and measures to promote sustainable development. The content of the book may be interesting to expert community, academics, and popular audience.

The Program Committee comprising of the recognized researchers from 15 countries had conducted a rigorous peer review. One of the unique characteristics of this book is that it gathers under conceptual umbrella Western and Eastern experts.

The volume consists of five parts. The titles of Parts I–II and V were represented previously in the last TIPG conferences of 2019 and 2020. Discussion on the pages of previous volumes has generated new works collected in the proceedings under this umbrella. At the same time, the volume discovered new directions for the studies. The titles of Part IV (Geography of Culture, Sport and Tourism) and Part III (Administrative Culture, Political Institutions and National Policies) are new topics of TIPG. These parts consist of the papers presented on new sections of TIPG.

The chapters of Part I “International Relations” cover such issues of international relations as anti-pandemic policies, digital and climate strategies, transport cooperation, oil & gas politics, etc. The main idea of the section is to discuss the effects of global issues on international relations and the effects of international relations on global issues. The geographic space is a background for this discussion. Some studies represent the international platforms as a context of politico-geographical processes (for instance, the European Union, BRICS, and Shanghai Cooperation Organization as platforms for countries’ cooperation). The chapters of the section discuss the international security issues related to the power distribution depending on the geographic location. The contemporary background is the COVID-19 pandemic.

The chapters of Part II “Ideologies of Regionalism and Globalization in Historical Context: Philosophy of Politics” focus on the spatial aspects of two parallel processes—globalization and regionalism. The authors discuss the effects of globalization on the ideology, identity, and symbolic of nations and communities. The authors discuss such trends as Asianization and shift of the power from West to East. The context of the section is designed by the historical framework of geographical issues with the use of a historical geographical approach to studying politics. Following Élisée Reclus, “geography is history in space whilst history is geography in time.”

Part III “Administrative Culture, Political Institutions and National Policies” moves from cases at the national level to the local one. The chapters cover such issues of domestic politics as anticorruption policies & governance quality, digital and sustainable development strategies, elections, etc. The section contains a set of cases for comparative analysis focused on national cases (for instance, a comparative study of public service in China and Russia).

The chapters of Part IV “Geography of Culture, Sport and Tourism” represent the culture as a factor of geography (for instance, international cultural exchanges, cultural policy, etc.). Why wasn’t Russian Soft Power in Ukraine effective? What is the role of sport in Russian diplomacy? What are the prospects of the global tourism industry after the COVID-19 pandemic? The section is intended to answer these and other questions.

Finally, the chapters of Part V “Migration and Socio-demographic Processes” deal with migration and socio-demographic issues. They focus on cases of European countries, China and Russia. The chapters discuss the gender aspects of migration. The authors make conclusions about the challenges of migration to the multiculturalism issues. The studies focus on national, regional, and local cases in the EU, Eastern, and Post-Soviet countries.

We would like to thank those who made this event possible and successful. We especially express our gratitude to the Program Committee members for their contribution to the event. We thank the authors for submitting their papers. We are proud to attract a great team of scholars from different countries and disciplines. We will work further to sustain and expand the TIPG community through joint research and collaboration.

St. Petersburg, Russia  
 St. Petersburg, Russia  
 St. Petersburg, Russia  
 Tartu, Estonia  
 St. Petersburg, Russia  
 St. Petersburg, Russia  
 Memphis, USA

Radomir Bolgov  
 Vadim Atnashev  
 Yury Gladkiy  
 Art Leete  
 Sergey Pogodin  
 Alexey Tsyb  
 Andrei Znamenski

# Contents

## International Relations

<b>Eurasia in the Post-pandemic Political and Socioeconomic Prospects</b> .....	3
Sait Ocakli and Ebulfez Suleymanli	
<b>EU Concerns About Security, 5G and Huawei</b> .....	12
Elena Boldyreva, Finn Stam, and Natalia Grishina	
<b>Key Aspects of Climate Strategies in Europe</b> .....	21
Marina Ermolina, Anna Matveevskaya, and Grigoriy Ustuzhanin	
<b>Russia's Chairmanship of the Arctic Council: Problems and Prospects</b> .....	37
Anastasiia Sboyshakova, Irina Nesterova, and Valeria Tikhonova	
<b>Political-Geographical Determinants of International Cooperation in the Development of International Transport Corridors (NSR)</b> .....	47
Jawahar Bhagwat	
<b>Making of a New Petro-State in the Middle East? Fossil Fueled Kurdistan Regional Government</b> .....	56
Akif Bahadır Kaynak and Deniz Ülke Arıboğan	
<b>UN Charter Interpretation in Settlement of Regional Conflicts: Guatemala Crisis of 1954</b> .....	67
Dmitry Novik and Alexei Vovenda	
<b>Development of Cooperation Between Russia and China in the Shanghai Cooperation Organization</b> .....	77
Talie Yagya and Yana Ashurova	
<b>A New Centennial Dream: China's Second Centennial Plan and Sino-US Relations</b> .....	86
Sunyoung Park	

<b>BRICS and the Contemporary Body Politic: Examining a Decade of Normativities in the BRICS Summit Declarations</b> .....	102
Aireen Grace Andal	
<b>Ideologies of Regionalism and Globalization in Historical Context: Philosophy of Politics</b>	
<b>On Border Energy and Cross-Border Communication in Geoeconomics and Geopolitics</b> .....	119
Yuriy Gladkiy, Viacheslav Sukhorukov, Svetlana Kornekova, and Regina Biktimirova	
<b>Biopolitics in the Era of Coronavirus and Artificial Intelligence</b> .....	132
Natalia Vasilieva, Zeinab Bahturidze, Sergey Pogodin, and Nadezhda Bogdanova	
<b>Digital Geography and Digital Borders in the Era of Information Globalization</b> .....	145
Elena Zinovieva	
<b>Globalization and the Principles of Tolerance</b> .....	152
Anton Nikulin	
<b>Professional Ethics in Higher Education</b> .....	159
Anna Riabova, Sergey Pogodin, Daria Lubina, and Marina Sablina	
<b>Thomas Hobbes and the Linguistic Construction of the International Political Space</b> .....	171
Nikolay Gudalov	
<b>Russian-Swedish Economic (Trade) Relationships in the 18th Century</b> .....	186
Olga Pavlova	
<b>Geographic and Historical Factors in the Development of Political Relations Between St. Petersburg and Africa</b> .....	199
Anastasiia Zotova and Sergei Poltorak	
<b>Administrative Culture, Political Institutions and National Policies</b>	
<b>Social and Political Influence of the Media on Corruption</b> .....	213
Ekaterina Dolzhenkova, Anna Mokhorova, Dmitry Mokhorov, and Vladimir Demidov	
<b>International Practice in the Organization of Management Accounting</b> .....	224
Liliya Filippova	

<b>In Search of the Ideology of Public Serving: Analysis of Regulatory Legal Acts of the Russian Federation and the People’s Republic of China</b> .....	234
Artur Vafin	
<b>Verb Representation of Information Sources in Chinese-Language Political Media Discourse</b> .....	251
Iana Guzei and Uliana Reshetneva	
<b>What is Donald Trump as a Brand? Public Opinion on the 45th US President and His Second Impeachment in American Social Media Discussions</b> .....	259
Daniil Volkovskii	
<b>Electoral Processes in Modern Europe: The Impact of the COVID-19 Pandemic on the Electoral Institution</b> .....	268
Nikolay Baranov	
<b>Sustainability and Digitalization as the Basic Principles of the German Environmental Agenda</b> .....	283
Yulia Kozina and Nadezhda Bogdanova	
<b>Main Trends in the Policy of Regionalism Formation in the Republic of Altai</b> .....	294
Nadezhda Tadina, Alexey Tsyb, and Tengis Yabyshtaev	
<b>Transformation of the Electronic Participation System in Russia in the Early 2020s: Centralization Trends</b> .....	309
Olga Filatova, Andrei Chugunov, and Radomir Bolgov	
<b>Geography of Culture, Sport and Tourism</b>	
<b>Universities, Cultural Diversity and Global Ethics: Opportunities for Moral Leadership</b> .....	323
Anna Riabova and Sergey Pogodin	
<b>The Role of Russian Soft Power Institutions in Ukraine (2007–2014)</b> ...	333
Dmitry Katsy, Igor Ivannikov, Sergey Chernov, and Ivan Reshetnikov	
<b>Sports Relations Between Russia and Europe Through the Lens of Sport Diplomacy</b> .....	346
Natalia Bogolyubova, Yulia Nikolaeva, and Elena Eltc	
<b>Sport as a Focus of Bilateral Contacts Between Russia and Post-Soviet Central Asia</b> .....	360
Ksenia Muratshina and Marina Valeeva	

<b>The Global Tourism Industry After the COVID-19 Pandemic: Prospects and Ways of Recovery</b> .....	376
Daria Matyashova, Anna Matveevskaya, Nadezhda Kharlampieva, and Victoria Pogodina	
<b>Migration and Socio-demographic Processes</b>	
<b>How Do Geographical Imaginaries Shape Academic Migration to Global Centres and Peripheries?</b> .....	393
Kamil Luczaj	
<b>Migrant Women as a Risk Group in Contemporary Human Trafficking</b> .....	406
Olga Lofichenko and Nikita Ivannikov	
<b>Sociological and Legal Peculiarities of Migration to Turkey: The Case of Russian-Turkish Marriages</b> .....	414
Nermiye Şentürk and Vadim Atnashev	
<b>Finnish Labor Migration Policy and Integration Instruments: Talent Boost Program Objectives and Methods</b> .....	430
Elena Kravchik and Olga Pavlova	
<b>Migration Processes of the Vepsian Population of the Vologda Region: Historical Aspects and Modern Trends</b> .....	441
Andrey Bashkarev	
<b>The Cham of Cambodia as a Divided People: From Refuge to Genocide</b> .....	451
Vadim Atnashev	
<b>Author Index</b> .....	459

# **International Relations**



# Eurasia in the Post-pandemic Political and Socioeconomic Prospects

Sait Ocakli<sup>(✉)</sup> and Ebulfez Suleymanli

Üsküdar University, Istanbul, Turkey  
{sait.ocakli, ebulfez.suleymanli}@uskudar.edu.tr

**Abstract.** There have been debates about how the pandemics will set off unprecedented events that possibly lead to a new world order. Therefore, Eurasian countries need to implement efficient policies and strategies not only to overcome the effect of the pandemics but also to find a good place in post-pandemic geopolitics. This presentation analyzes similarities and differences in domestic factors that have led Eurasian countries like Russia, Belarus, Ukraine, Turkey, Azerbaijan and the Central Asian states to give various responses to the pandemics. The paper assesses possible outcomes of these various policies and strategies on geopolitical future of these countries. In this framework, a special emphasis will be placed on digital transformation, health care and migration in order to see whether Eurasian countries take measures to adapt to changes in post-pandemic geopolitical order.

**Keywords:** Eurasia · Pandemic · Central Asia · Russia · Azerbaijan · Geopolitics · World Order

## 1 Introduction

The COVID-19 pandemic has confirmed that all parts of the world are vulnerable to global crises than ever before. Eurasia has accordingly received its share of challenges brought by the pandemic. However, since the Eurasian countries have different political and socioeconomic dynamics, they have implemented various policies and strategies in order to cope with the catastrophic influences of the pandemic. Meanwhile, there have been rising concerns about how the pandemic will set off unprecedented events that possibly lead to a new world order. It has been argued that in the post-pandemic world era, China will expand its power at the expense of the western world. At this point, the countries of the Eurasian space need to implement effective policies and strategies not only to overcome the pandemic but also to find a good place in the post-pandemic world order. This paper aims to analyze how the Eurasian countries such as Russia, Ukraine, Belarus, Turkey, the Caucasian and Central Asian republics have responded to the ravaging pandemic while they have to deal with overwhelming issues of their domestic and foreign agenda. This paper also investigates possible outcomes of domestic and foreign policies of the countries on their geopolitical future.

## 2 Russia

At the outset of the pandemic in March 2020, the Eurasian countries seemed to be burdened with their usual domestic and international agenda. Moscow prepared for the referendum which was scheduled for April 2020 to decide on constitutional reforms that proposed to make changes in Russia's administrative system and further President Vladimir Putin's term in office. In foreign affairs, the Kremlin sought to protect Russia's geopolitical interests in Syria and Libya and fought with Saudi Arabia over oil prices. At the beginning of the pandemic, Moscow seemed to perform well as the health care facilities of the country were officially able to handle the low number of the COVID-19 cases. As Judy Twigg points out, benefitting from the Soviet experience, Russia apparently has an advanced health care system as it fares better than many of the OECD countries concerning the number of medical staff and hospital beds. The centralized administrative system also enables a swift reallocation and mobilization of resources as proven by the rapid construction of the pandemic hospital in Moscow [1]. In addition, a number of Soviet-era institutions of contagious diseases and quarantine measures help not only Russia but also other former Soviet states in their fight with the COVID-19 pandemic [2]. The media reports on Moscow's medical assistance to other countries have also helped Moscow to have the confidence of the Russian public opinion showing how Serbia, Italy and even the USA have been desperate to welcome Russian medical specialists in their fight with the pandemic [3]. An operational headquarters was formed on 27 January 2020 with the purpose of coordinating policies against the coronavirus [4].

Russia has also effectively developed Sputnik V vaccine and agreed to distribute it to many African, Asian and Latin American countries which have difficulty in having access to the vaccines developed in western countries. While wealthy countries have manifested me-first approach to get jabs as many as possible and vaccine companies have refused to release patents and agree for joint production, Russia has signed agreements with many countries for joint production of its vaccine. Moscow has accordingly improved its global image thanks to its vaccine policies [5]. As Birol Akgün and Metin Çelik point out, Russia's swiftness to send medical aid to Italy and Spain has showed how non-western countries could be more successful than western countries in times of need. The western international institutions such as EU and NATO failed to provide support to two member countries such as Italy and Spain as they were severely hit by the pandemic. Other EU and NATO members also adopting me-first approach not only hesitated to mobilize their sources for Italy and Spain but also closed their borders with these countries. Therefore, the inefficiency of the western world during the pandemic has casted doubts on pro-European and pro-Atlantic ideals [6]. It is also argued that the pandemic has proven Russia and China right about their objection to the US-led liberal world order and their assertion for a multipolar world [7].

Besides, although the Trump administration accused China of making the world face such a perilous disease and even labeled it as the Chinese virus, Putin has preferred to be supportive of China and warned the United States to refrain from stigmatizing China and spreading provocative arguments on the origin of the virus [8]. At the meeting of the UN General Assembly in September 2020, Moscow countered the attempts of the American administration to raise concerns about the responsibility of the Chinese government for spreading the virus. Foreign Minister Sergey Lavrov implicitly blamed the United States

for searching a scapegoat for its domestic problems [9]. As the Kremlin has maintained its diplomatic support to China, speculations have arisen concerning how Russia needs to cooperate with China in order to lead the post-pandemic world order. In this context, Talmiz Ahmad assesses that as the decrease in the US willingness and capabilities to lead the world is now more evident, Russia should seize the opportunity provided by the pandemic and fashion a tripartite partnership with China and India in order to shape the post-pandemic world. According to him, such partnership will play a constructive role in solving global problems. In the framework of China's Silk Road Initiative, Moscow together with Beijing and New Delhi can propose projects for the economic and social development of the poor regions of the world. The United States does not also have much credibility to assume an impartial peace-maker role because of its destructive military occupations. In alliance with India and China, Russia can allegedly mediate peace in the Middle East. Ahmad also believes that although the recent border clashes between India and China seem to pose a challenge to tripartite cooperation, Russia managed to turn the crisis to its advantage by organizing a video conference among the foreign ministers of three countries [10].

In similar vein, Stergios Skaperdas draws attention to Chinese and Russian role in checking the US power in Eurasia. From his point of view, Russian military and diplomacy have barred the United States from increasing its influence in Eurasia while China has been rapidly closing the gap with the United States in economy, military and technology. The pandemic led the US economy to enter into a severe recession and thus accelerated the US decline whereas China has healed its wounds and begun to recover from the coronavirus crisis [11]. Qingming Huang defines China, Russia and Iran as revisionist powers which threaten the US-led liberal world order. All of these states reject the liberal-democratic model of the western world and propose their own economic and political model. Huang anticipates that like China and Iran, Russia will take advantage of the coronavirus crisis to strengthen control over its people. Moscow intends to follow China's example to set up a system of control with technology and plans to acquire surveillance capabilities such as facial recognition and location tracking networks. Since several countries in Africa, Asia and Latin America see Chinese and Russian models of political and economic development more appealing than western capitalism and democracy, they are willing to receive Chinese and Russian military and technological help [12]. The pandemic accordingly presents an opportunity to revisionist capitals such as Moscow and Beijing to provide an alternative to the US-led liberal world order.

In addition, the perception that Asian countries such as China, Indonesia, South Korea and Taiwan have more successfully handled the coronavirus crisis than the western world led Russian public opinion to be increasingly in favour of Asian model of political and economic development which prioritizes obedience over individualism [13]. It is therefore expected that the pandemic will strengthen Eurasianist stance in Russia at the expense of pro-western tendencies.

According to Gunter Deuber, while national paid-leaves and other measures have restricted social and economic life and therefore reduced economic outcome, economic downturn in Russia is expected to be relatively less than in the advanced economies.

Russia is not highly integrated into global economy while tourism and small and middle-size enterprises do not play a significant role in economy. As a major customer of Russian oil and gas, China's announcement concerning the containment of the pandemic in its territories and the normalization of its economic activities has pleased Moscow. Russia should benefit from China's economic recovery and energy consumption and lessen the adverse influences of dwindling oil and gas demand [14]. It can be stated that Moscow should reap the fruits of its relations with Beijing since China's bouncing back from the pandemic is anticipated to help Russian economy to recover sooner than the western economies. In addition, maintaining budget surplus and accumulating large financial reserves for difficult times, Moscow seems to have financial resources not only to cope up with the economic burden of the pandemic but also to improve its economic and technological infrastructure [15].

The pandemic has not posed much serious challenge to the public approval of the Kremlin's policies as Putin emerged victorious from the 2020 referendum allowing him to make constitutional changes to Russian political system. The 2021 legislative elections also ended in the victory of the pro-Putin United Russia having an overwhelming majority of the seats in the parliament.

The pandemic has also brought challenges to the Russian state and society. Pandemic cases and deaths continue to ravage Russia like other countries. At a meeting with the entrepreneurs in March 2021, Putin pointed out to the pandemic and the collapsing oil prices as the two problems of the country [16]. While Russia's oil and gas-led economy which has started to show some signs of recovery after a period of recession due to the western sanctions and weak oil prices, the demand for Russian oil and gas has fallen because of the contraction of the world economies during the pandemic [17]. The Kremlin has resorted to national paid-leaves to lessen the spread of the virus and introduced other means of support such as deferrals on taxes and payments for the businesses. The Russian government also plans to move funds from military to social spending to support its citizens and maintain budget surplus and large financial reserves as well [18]. Moscow's commitment to fiscal discipline is expected to lessen the burden of the pandemic on Russian economy.

### **3 The Central Asia**

The Central Asian republics has encountered the pandemic-led economic problems since they are geographically between China and its commercial partners in Europe and the Middle East [19]. All governments in the region, except for Turkmenistan, have accepted the existence of the coronavirus cases and deaths and introduced similar measures executed in the other parts of the world [20]. While Kazakhstan and Turkmenistan rely on oil and gas revenues, Kyrgyzstan, Tajikistan and Uzbekistan do not have viable economic resources and are heavily dependent on remittances. Therefore, when the pandemic compelled the countries to seal off their borders, remittance flows between Central Asia and the other parts of the world have been slowed down. This situation adversely affected the economies of Kyrgyzstan, Tajikistan and Uzbekistan [21]. The pandemic aggravated the burden of the declining oil and gas prices on Kazakhstan, Turkmenistan and Uzbekistan as their hydrocarbon exports dropped because of the slowdown in China's economy [22].

Under these circumstances, the Central Asian governments will plausibly be eager to participate in the Eurasian Economic Union to cooperate with Russia and other regional countries to address economic and social challenges caused by the coronavirus [23]. The increasing concerns over regional security due to the Taliban's takeover of Afghanistan will make the Central Asian governments be willing to expand military cooperation with Russia in the post-pandemic period. Parallel to the recovery of Chinese economy, Beijing has also resumed its Silk Road Initiative to expand its influence in the region [24]. It also aims to increase its share in the Central Asian technology market by giving loans to promote the purchase of digital surveillance devices produced by the Chinese firms such as Huawei and Hikvision [25]. In this respect, Russia and China will maintain their dominant role in the post-pandemic Central Asia.

Although the pandemic-led digitalization has sparked controversies and conspiracies about the intention of the authorities to expand their control of life, it has also provided opportunities for Central Asian economies. As Daulet Zhailybayev explains, the lockdown measures in Kazakhstan has revealed the shortcomings of the internet infrastructure and propelled the government to invest in software projects such as e-government and Digital Kazakhstan. In the meantime, digitalization has begun thanks to the initiative of the local authorities. For example, the museums in the southern city of Turkestan have digitalized and opened their collections to online users, organized online seminars and virtual museum tours. The museum's online activities have then become a source of relief during the strict measures of isolation [26]. This example of pandemic-led digitalization shows how internet could be used to reach out to people from different destinations, advertise and attract more visitors to one of the most important historical sites of the world.

## 4 The South Caucasus

The three South Caucasian states have struggled with similar social and economic problems during the pandemic. Armenia and Georgia have suffered much from border closures since their economies rely on remittances and tourists from Russia [27]. Compared to Armenia and Azerbaijan, Georgia seemed to achieve a relative success in the struggle against the coronavirus [28]. However, the euphoria of victory has faded away with the second wave of the pandemic as the restrictions introduced by the Georgian authorities led to demonstrations [29]. Like other hydrocarbon-dependent countries, Azerbaijan has suffered from shrinking oil and gas demand. Meanwhile, the Nagorno-Karabagh conflict escalated into war in autumn 2020. Armenia was defeated by Azerbaijan and forced to agree to the Russian-mediated ceasefire agreement. In both Armenia and Azerbaijan, the conflict has taken precedence over the pandemic. The defeat sparked popular demonstrations and led to a legitimacy crisis for the Armenian government under Nikol Pashinyan. By the same token, the successes of the Azerbaijani military provided Baku the opportunity to appease public concerns about the management of the coronavirus crisis. As the broker of the current ceasefire and provider of peacekeeping troops in Nagorno-Karabagh, Russia has strengthened its position in the region. Armenia and Azerbaijan also rely on Russia in their struggle against the pandemic and carried out negotiations with Moscow to receive sufficient doses of Sputnik V vaccine [30].

## 5 Belarus and Ukraine

In western part of post-Soviet space, Belarus under Alexander Lukashenko has refrained from introducing lockdown measures against the pandemic so that economy would not suffer from prolonged closures [31]. Lukashenko's government has also been overwhelmed by the protests of the opposition which has objected to the results of the 2020 presidential elections. In response to the western criticism of the handling of the elections and the treatment of the opposition, Lukashenko blamed the US and the European countries for provoking demonstrations as a part of their strategy to transform Belarus into an anti-Russian country [32]. Concerning the US-Chinese brawls over the origin of the coronavirus, Minsk blamed the US for casting unfounded claims against China [33]. In the framework of the events during the pandemic, it is possible to argue that Lukashenko intends to maintain pro-Russian position in the post-pandemic world order. The pandemic has worsened political and socioeconomic problems in Ukraine such as the conflict in Donetsk and Luhansk and the failure of the state to provide services to its citizens [34]. Anders Aslund underlines that Ukraine's President Volodymyr Zelensky considering limited economic means of the country asked leading fifteen businesspeople to take care of health services in the regions. The Ukrainian businesspeople agreed to take an active role in the struggle against the coronavirus and used their wealth to provide medical supplies [35]. Zelensky's strategy seems to be a successful example of anti-crisis management but leaving health care to the businesspeople may damage the credibility of the Ukrainian state in the eyes of the people regarding its ability to provide basic public services. In addition, the disagreements between Kyiv and the local authorities on introducing curfew and other measures have reportedly damaged Zelensky's public approval [36].

## 6 Turkey

The pandemic-induced global recession has exacerbated Turkey's struggling economy as well. The curfew measures and border closures seemed to fail Turkish authorities' expectation to extract more revenue from tourism as the declining currency has made Turkey a cheaper destination [37]. However, parallel to the acceleration of the vaccination programme, the government has loosened pandemic measures to facilitate economic recovery. Accordingly, Turkish economy has begun seeing itself on a path of restoration as it has achieved highest growth rate in last two decades [38]. The weakened Turkish lira also contributed to the record rise in exports in 2020. It is believed that Turkish digital games have benefitted from the plunging currency and is expected to extract nearly one billion USD revenue by the end of 2021 [39]. Along with growing prospects of economic recovery, Turkish experts have expressed their concerns about Turkey's readiness for the post-pandemic world order. In this regard, long before the outbreak of the pandemic, Turkey as a growing regional power had started to seek for autonomy from NATO and EU and cultivated relations with China and Russia [40]. Seeing that the pandemic will accelerate the collapse of the US-led liberal world order, Turkey should be prepared for future geopolitical uncertainties [41]. To be competitive in the post-pandemic era, Turkey needs to maintain investments in national security and accelerate

digital transformation and use of artificial intelligence in education, health, industry and other areas. The Turkish authorities should also address social problems led by the coronavirus crisis, since the studies have revealed that the pandemic led elderly and young people to lose their social ties with their environment and therefore increased the feeling of loneliness among these groups of Turkish society [42].

## 7 Conclusion

To sum up, it is possible to state that the Eurasian countries have been adversely affected by the ongoing pandemic crisis and tried to prevent the spread of the coronavirus by implementing a variety of policies in accordance with their economic capabilities. Having better financial means than other post-Soviet countries, Russia has resorted to measures such as paid leaves, curfew and border closures. However, like the economies of hydrocarbon producers including Azerbaijan and Kazakhstan, Russian economy has been shaken by the decrease in oil and gas demand because of the pandemic. The governments of the resource scarce countries like Armenia, Belarus, Kyrgyzstan and Tajikistan have seen how their economies are dependent on remittances from Russia as their citizens have been deprived of access to Russia's labour market due to border shutdowns. Along with political crises such as the recent Nagorno-Karabagh war and Taliban's seizure of Afghanistan, the coronavirus has made the regional countries understand the importance of the cooperation with Russia. In the post-pandemic world, the resource scarce countries of the region are anticipated to be more willing to take part in regional integration projects such as the Eurasian Economic Union for a better management crisis in future. The post-Soviet countries also welcome China's intention to resume Silk Road Initiative to receive investment and therefore start economic recovery as soon as possible. In the light of all these circumstances, Russia will strengthen its leading position and also expand cooperation with China in the post-pandemic Eurasia. Ankara also intends to increase cooperation with Moscow and Beijing due not only to its growing economic ties with Russia and China but also to its tense relations with the US and the EU.

## References

1. Twigg, J.: Russia's health care system and the Covid-19 pandemic. *Russ. Anal. Dig.* **251**, 3 (2020)
2. Kramer, A.E.: How bubonic plague has helped Russia fight the coronavirus. *New York Times* (2020). <https://www.nytimes.com/2020/04/15/world/europe/coronavirus-plague-russia-soviet-union.html>
3. Goode, J. P., Stroup, D.R., Gaufman, E.: Everyday nationalism in unsettled Times: In Search of Normality during Pandemic. *Natl. Pap.* **17**, (2020)
4. The Cabinet of Ministers commented on the publications about the creation of the FMBA headquarters to combat the coronavirus. TASS (31 Jan 2021). <https://tass.ru/obschestvo/7656169>
5. Vaccine diplomacy boosts Russia's and China's global standing. *The Economist* (29 April 2021). <https://www.economist.com/graphic-detail/2021/04/29/vaccine-diplomacy-boosts-russias-and-chinas-global-standing>

6. Akgün, B., Çelik, M.: Global governance in the Postpandemic period: the World Health Organization and the Future of International Organizations. In: Şeker, M., Özer, A., Korkut, C. (eds.). *Reflections on the Pandemic in the Future of the World*, vol. 359. Türkiye Bilimler Akademisi, Ankara (2020)
7. Oğuzlu, H. T.: The political-economic transformation in the post-pandemic Era. Reflections on the Pandemic in the Future of the World, vol.439. In: Şeker, M., Özer, A., Korkut, C. (eds.). *Türkiye Bilimler Akademisi*, Ankara (2020)
8. Ahmad, T.: West Asia in the post-pandemic world order: shaping the RIC (Russia-India-China) as an instrument for regional Peace. *Asian J. Middle East. Islam. Stud.* **14**, 332 (2020)
9. Lederer, E.M.: At UN, China, Russia and US clash over pandemic responses. *Washington Post* (24 Sep 2020). [https://www.washingtonpost.com/world/asia\\_pacific/at-un-china-russia-and-us-clash-over-pandemic-responses/2020/09/24/17697a5e-fe89-11ea-b0e4-350e4e60cc91\\_story.html](https://www.washingtonpost.com/world/asia_pacific/at-un-china-russia-and-us-clash-over-pandemic-responses/2020/09/24/17697a5e-fe89-11ea-b0e4-350e4e60cc91_story.html)
10. Ahmad, T.: West Asia in the post-pandemic world order: shaping the RIC (Russia-India-China) as an instrument for regional peace. *Asian J. Middle East. Islam. Stud.* **14**, 323–344 (2020)
11. Skaperdas, S.: The decline of US power and the future of conflict management after Covid. *Peace Econ. Peace Sci. Public Policy* **26**, 1–5 (2020)
12. Huang, Q.: The pandemic and the transformation of liberal international order. *J. Chin. Polit. Sci.* **26**(1), 1–26 (2020). <https://doi.org/10.1007/s11366-020-09698-0>
13. Laruelle, M., Alexseev, M., Buckley, C., et al.: Pandemic politics in Eurasia: Roadmap for a new research subfield. *Probl. Post-Communism* **68**, 8–9 (2021)
14. Deuber, G.: Two economic crises at the same time—too much even for Russia. *Russ. Anal. Dig.* **251**, 10–11 (2020)
15. Cheang, C.: Russia's domestic politics and foreign policy. *RSIS Commentaries* **89**, (2020)
16. Putin: We have two problems – the collapse of the oil market and the outbreak of the coronavirus. *Komosmol'skaia Pravda* (26 March 2020). <https://www.kp.ru/video/768894>
17. Connolly, R., Hanson, P., Bradshaw, M.: It's déjà vu all over again: COVID-19, the global energy market, and the Russian economy. *Eurasian Geogr. Econ.* **61**, 511–531 (2020)
18. Foy, H.: Russia to cut defence spending in bid to prop up ailing economy. *Financial Times* (21 Sep 2020). <https://www.ft.com/content/763b1345-b703-40db-8065-167cbfe7f22f>
19. Gleason, G., Baizakova, K.: COVID-19 in the Central Asian region: National responses and regional implications. *Connect.: Q. J.* **19**, 101–114 (2020)
20. Putz, C.: Turkmenistan still persists in COVID denial. *The diplomat*, 10 November (2020). <https://thediplomat.com/2020/11/turkmenistan-still-persists-in-covid-denial>
21. Bouma G. and Marnie S.: COVID-19 and Central Asia: Socio-economic impacts and key policy considerations for recovery. *UNDP Report* (2020). [https://www1.undp.org/content/dam/rbec/docs/COVID19report\\_CentralAsia.pdf](https://www1.undp.org/content/dam/rbec/docs/COVID19report_CentralAsia.pdf)
22. Hashimova, U.: Pandemic slows Central Asia's gas exports to China. *The diplomat*, 8 Sep (2020). <https://thediplomat.com/2020/09/pandemic-slows-central-asias-gas-exports-to-china>
23. Akhunov, A.M.: The COVID-19 pandemic as a challenge for the post-Soviet countries of Central Asia. *Mezhdunarodnaya Anal.* **11**, 126–127 (2020)
24. Asiryany, A.: Post-COVID, China set to gain in Central Asia. *The Diplomat*, 29 July (2020). <https://thediplomat.com/2020/07/post-covid-china-set-to-gain-in-central-asia>
25. Laruelle, M., Alexseev, M., Buckley, C., et al.: Pandemic politics in Eurasia: Roadmap for a new research subfield. *Probl. Post-Communism* **68**, 9 (2021)
26. Zhailybayev, D.: How the pandemic changes City life: Turkistan City example? *Eurasian Research Institute weekly e-bulletin*, 277 (2020). <https://eurasian-research.org/wp-content/uploads/2020/11/Weekly-e-bulletin-19.10.2020-25.10.2020-No-277.pdf>

27. Polláková, L.: South Caucasus States set to diverge further due to COVID-19. Chatham house, (2020). <https://www.chathamhouse.org/2020/06/south-caucasus-states-set-diverge-further-due-covid-19>
28. Tylor, A., Berger, M.: When it comes to coronavirus response, superpowers may need to study smaller nations. Washington Post (16 May 2020)
29. Hundreds of people in Georgia protest against coronavirus restrictions. Reuters (22 April 2020). <https://www.reuters.com/article/health-coronavirus-georgia-protests-idUSL5N2CA69B>
30. Armenia reaches agreement with Russia to buy one million doses of Sputnik V. TASS (14 April 2021). <https://tass.com/world/1278001>
31. Belarus saved its economy by abandoning lockdown amid pandemic — Lukashenko. TASS (9 Aug 2021). <https://tass.com/world/1323933>
32. Lukashenko accuses US and Europe of orchestrating Belarusian protests. TASS (21 Aug 2021). <https://tass.com/world/1192317>
33. US groundlessly accuses China of hiding information on SARS-CoV-2, Minsk says. TASS (2 Sept 2020)
34. Laruelle, M., Alexseev, M., Buckley, C., et al.: Pandemic politics in Eurasia: Roadmap for a new research subfield. *Probl. Post-Communism* **68**, 10 (2021)
35. Aslund, A.: Responses to the COVID-19 crisis in Russia, Ukraine, and Belarus. *Eurasian Geogr. Econ.* **61**, 534–537 (2020)
36. Markedonov S.: Russia and Eurasian Dilemmas. *Konrad Adenauer Stiftung Strategic Insight* **3**(5), (2020). [https://minskdialogue.by/en/research/opinions/the-world-handcov-d-russia-and-eurasian-dilemmas?fbclid=IwAR0IQJS\\_dFq3KGtAFy1Fa5QAaXIZ40BfaldCAOJ4SX5PLJBIqhZt-xRTKo4](https://minskdialogue.by/en/research/opinions/the-world-handcov-d-russia-and-eurasian-dilemmas?fbclid=IwAR0IQJS_dFq3KGtAFy1Fa5QAaXIZ40BfaldCAOJ4SX5PLJBIqhZt-xRTKo4)
37. Büyük, H.F.: Turkey's struggling economy faces new hit from tourism shutdown. *balkan insight*, 27 May (2020). <https://balkaninsight.com/2020/05/27/turkeys-struggling-economy-faces-new-hit-from-tourism-shutdown/>
38. Yackley, A.J.: Turkish economy bounces back from pandemic at fastest rate in 21 years. *Financial Times* (1 September 2021). <https://www.ft.com/content/fa853948-d878-4005-9860-a8469f47d3fd>
39. Büyük, H.F.: Turkey's digital gaming industry soars on cheap lira, *Pandemic. Balkan Insight*, (2021). <https://balkaninsight.com/2021/09/27/turkeys-digital-gaming-industry-soars-on-cheap-lira-pandemic/>
40. Kutlay, M., Öniş, Z.: Turkish foreign policy in a post-western order: strategic autonomy or new forms of dependence? *Int. Aff.* **97**, 1085–1104 (2021)
41. Bayraktar, B.: Is Turkey ready for the Post COVID-19 World Order? *Insight Turkey* **23**, 117–140 (2021)
42. Süleymanli, E.: The phenomenon of singlehood during the pandemic. Collection of materials of the online international scientific and practical conference Eurasian psychological science and practice: interdisciplinary trends. S. Amanzholov East Kazakhstan University, s, Kazakhstan (13–14 April 2021), 18 (2021)



# EU Concerns About Security, 5G and Huawei

Elena Boldyreva<sup>1</sup>  , Finn Stam<sup>2</sup>, and Natalia Grishina<sup>1</sup> 

<sup>1</sup> Peter the Great, SPb Polytechnic University, Saint Petersburg, Russia

elena1971@yandex.ru

<sup>2</sup> Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

fb.stam@icloud.com

**Abstract.** The economic revolution that world is experiencing now promises to change the traditional service sector in economics to a different one with computer machineries that will take unmanned decisions. New technologies that appeared in the era of technical and economic revolutions have become of crucial importance in the innovative global economy. The nearest years promise that 5G network will be widely incorporated into technologies and economics. Unmanned data exchange is a basic ideology of 5G technology, which is supposed to substitute 4G. 5G may be used to develop different innovations such as self-driving cars, smart cities and drones for postal delivery. IoT technology is highly discussed in this respect.

**Keywords:** 5G · EU · Huawei · Security · NATO

## 1 Introduction

The economic revolution the world is experiencing now is changing traditional approach to service. It promises to be very different with computer machineries and decisions, with no human interventions. In the era of technical and economic revolutions, new technologies have become of an extraordinary significance to innovative global economy. In the nearest future 5G technology is bound to be wildly incorporated into economics and industries. Basic ideology of 5G is mechanical data exchange that is supposed to substitute 4G technology. It may be used to develop different innovations such as self-driving cars, smart cities and drones for postal delivery. IoT technology is highly discussed in this respect.

5G is the basis for IoT and thus for a smart city technology. This huge potential of 5G will bring economic growth, efficiency and social progress. Achieve that, European Union has to provide a more clear vision about the dates and algorithms for 5G practical implementation.

Chinese Huawei is providing the best quality-to-price ratio of 5G. Other companies are having a technological gap with 5G. In this context, Huawei is considered the only option in a short-term horizon [1].

However, adoption of 5G may meet a great number of challenges connected with security issues. 5G gives to its provider an opportunity to influence communicated data, save and use it for different purposes. This is a very risky business from the point of

security issues and for market competition. If EU makes a stake at a Chinese technology, three options come into detailed consideration: the first is about total abundance of Chinese 5G, second is the possible partial implementation and third is if to make it free of charge.

## 2 Methodology and Data Analysis

In this research news from social networks was used to clarify the latest developments with 5G. We may conclude that the current EU policies do not have clear outlines and it gives a vague impression about the situation with 5G. The joint statements and initial reports about EU-China summits were used to clarify agreements reached between the countries. Most of the referred documents come from European External Action Service website. The research examines various blogs and websites for more detailed vision on EU policy concerns with 5G. They are effective in giving a general background information about 5G technology, Internet of Things and related security issues. The examples of such websites are The Strategist and EU-Logos Athena ASBL. Scientific articles were also used for analysis of cases trailing 5G technology. Position of NATO were under scrupulous consideration in security issues risks associated with 5G and Huawei. Some prompts were found about US and EU positions towards potential ban of Huawei. Official documents of NATO Cyber Defense Center of Excellence were very useful to serve this goal [1].

To meet the goals of the research several interviews were conducted. The first respondent (Interviewee A) is from Oracle Company. Being a leading analyst and publisher on company sales strategy and for Oracle sales community, IA updates cover high-level competitive strategies such as in-memory applications, cloud applications, future products, services, technologies, and partner strategies. The expert gives regular trainings to Oracle sales and pre-sales teams around the world and participates in strategic sessions, market demand workshops. The second respondent (Interviewee B) is a doctoral student at Charles University in Prague. Being an expert for cybersecurity analytical group along with other graduate students, he also specializes in international political economy. The concerned subject covers a wide spectrum of studies, thus we limit our research to potential perspectives of 5G technology only for science and business. Business has different vision on the problem than the science. It allows us to identify and incorporate factors relevant to the private sector in our policy memorandum. General questions were asked in semi-structured interviews. Further, in this article we enlighten the issues met in the interviews.

Interviewee A points out that the power of Huawei should not be overestimated. Huawei is the company with the cheapest 5G, but we are to remember that any market is a competitive environment. Chinese company ZTE also has a 5G network, but remains out of sight for a while. According to Interviewee A, in several years it is quite probable that ZTE will compete with Huawei on 5G span and coverage. European providers Erickson and Nokia can equally provide 5G but the price is unrelatedly high. The second expert says that Samsung as Korea-based company is also capable to deliver a low-cost network option within 2 years. It will take a while, but Interviewee A predicts that the competition will be tough. He points out that “Countries will have a choice”. The problem is that

European Union does not have a unanimous position on this issue. Southern Europe and Italy, in particular, will not benefit much from fast 5G implementation and thus there will not be quick collaboration with Northern Europe. Besides there is no consensus in Western Europe as well. IA states that 5G also may be considered as a status marker. Some countries want it only because it may be very prestigious from a political and economic point of view. This network is currently a very attractive resource, especially for business, while the public sector will benefit less from 5G.

In conclusion, Interviewee A says that adoption of 5G may be rather problematic. For its distribution, Chinese Huawei is planning to use a newly updated satellite system. But, for example, the Netherlands will not have a chance to get this system until 2022. IA gives a conclusion about the number of substantial issues. At first, Europe will have big difficulties in terms of cooperation between states. Countries may have different interests and 5G value varies at different degrees. Due to economic reasons, the situation will be more or less the same for a period of time. In addition, rhetoric of the US appears to be not very influential, and it does not look like Europe hopes for their help. The question is how strong is a need of 5G in Europe. IA believes that it is better to wait for a while for more clear vision of the situation. Despite the fact that GDP may decrease, but definitely not in big numbers, security issues are of a greater importance now.

You may follow the interview questions as they may give more clear vision about the issues considered in the research. “With China being the only country able to export 5G network, there are some safety and security dilemmas. Can you state your thoughts about the perspectives for both public and private sector? What may be the potential dilemmas for implementation of 5G?” “A lot at stake from the economic perspective. Quite possible that economic growth may be hindered if not to adopt 5G now. What would you advise to European government? Should they implement 5G or not? What are the potential risks?” “The US government has already decided not to have business with Chinese companies. What are your thoughts about it and how trade wars may influence the situation with Europe?” “Can you try to foresee the future of the 5G network?”.

### 3 Research Design and Details

The above stated problems are closely correlated with our research goals. The essence of the problem is that it does not contain any policy at all, which is particularly characterized by the wait-and-see policy of EU countries. One substantial issue is that this policy may bring to a great division. EU countries need to achieve some unanimity if they want to implement Huawei 5G. Secondly, it is important that this political decision will minimize the risks of the Huawei network. Undoubtedly, it applies not only to political decisions. While considering the problem, it is also necessary to discuss the inquiry and need for 5G. In this respect, some temporal problems come into light: if the need of this technology is strong in Europe, what are the benefits versus costs ratio. There is a problem of the “now” issue as for a while the technology is not widely spread. It is of great significance to take into account this temporal aspect. Perhaps the lack of unanimity in the EU can be attributed to the huge difference in demand between countries. Therefore, it is also important that for each EU country there will be sufficient benefits and profits. To summarize the goals we can state that: first, 5G and Huawei

will bring economic growth, secondly is the need in unanimity within EU, third is the reduction of economic dependence on other continents and fourth is minimization of risks 5G adoption can create. The solution can be found while taking clear vision on the priorities of each goal.

If to take into account the crucial importance of a technology for economics and politics and lack of time for finding alternatives to the technology, it seems that priority lies in the partial implementation of Chinese 5G. It gives an opportunity for the market to be competitive and for governmental institutions not to be involved in using 5G due to security reasons.

Obviously, 5G is the future of our society. With high data capacity and minimal differences, 5G may serve as the basis for Internet of Things. IoT is the technology with independent and direct computer control of 'things' connected with the Internet which share data with other things. Society and individuals become very dependable on the technology. The research of Mattern and Floerkemeier 'From Internet of Computers to Internet of Things' (2010) argues that IoT products use built-in sensors to collect data. The products interact with each other and with people via the Internet. The system is functioning more effectively if IoT controls and manages the processes. It may highly improve security systems connected with traffic control, etc. The cases mentioned by Mattern and Floerkemeier may be considered as examples of giving a soft and non-intrusive support for aged adults in their daily routines and automobiles that communicate with each other [1].

IoT may improve the efficiency, reduce costs, retain clients, produce a more target-oriented marketing, create new business models, provide more clear represented data, and supply with better service and high security. Obviously, IoT is a very perspective technology from business, economic and social aspects.

EU is very keen on implementation of the technology in Eurozone. They want to be progressive and to keep up with the rest of the world. IoT and 5G are crucial technologies for EU. In fact, there are some IoT applications in 4G. Nonetheless, the prospects mentioned above is in need of more powerful and modern networks. 5G is the technology that satisfy all these needs.

5G seems the only option for now that makes IoT possible as it is the basis for all IoT applications. Thus, the safety of the technology must be of a crucial importance. From this perspective the traffic security, business confidentiality, consumer assistance depend on security issues of 5G. Mattern and Floerkemeier claim that "Infrastructure of Internet of Things must be not only effective, scalable, safe and secure but also to answer the social and political expectations, be commonly employed and take into account economic considerations" (Mattern and Floerkemeier [12], p. 245) [2].

The span of IoT usage is increasing dramatically and the safety of the net becomes much more important than it was before. It concerns both widely known aspects of security and new ones that appear. For instance, we can provide some objects an access to different services and ban their contact with other objects in a particular time with no human to control the process. Moreover, business operations with 'smart objects' must be protected. Thus, the net security is of significant importance as its usage becomes more intensive, overwhelming and dependent. Not only private households at risk but businesses and society, which depend on it. If the Internet is broken or under attack it

may become a catastrophe for economics and society. Not very friendly partners of EU may use this weak spot. The service and equipment ought to be chosen carefully as it gets a privileged position in controlling Internet [3].

The risks of using 5G are obvious. Most challenges are connected with the potential influence on data communication from outside and this is not the news. However, IoT and future application products with 5G become more all-encompassing and interconnected. It concerns all consumer goods and networks in state social institutions and business. This huge interdependency makes the access to big data too easy. More companies, social institutions, individuals are becoming related to automatization processes. Society depends on energy and electricity and it will appear in 5G very soon. The risks are not connected by hackers only. Huawei that provides budget-friendly 5G seems to be affiliated with Chinese government. It is rather dodgy business as there is a probability that Huawei may provide state bodies with private data. To do this there is no need for Huawei to communicate with the government directly [4]. According to Chinese legislative system, it is necessary for private business and individuals to cooperate with state authorities. In fact, this law allows state bodies to get data legally. Security risks analysis and arguments about 5G queries dictate that in a short run it will be very problematic for EU to work out the detailed policy about 5G implementation. With no adopted policy, business community remains in the dark about the future of 5G in EU. If EU wants to compete in the globe, they are in a very need of the technology. Chinese Huawei is likely to continue to be the cheapest high quality 5G provider with huge investments. However, business is not sure if EU will take up Chinese 5G due to security risks. Nevertheless, if they decide to adopt 5G what may be the terms. There are alternative technologies that are less developed and more expensive but business are not ready to invest because European Union may choose a different way. EU must be very quick with decision about 5G otherwise, they may lose a very effective economic product and market. EU ought to come to unanimous conclusion about 5G and its service provider. With ‘general freedom’ movement in EU, there is no common policy regarding external relations. EU has many doubts, as they are to make their decision in the times of so-called trade war between US and China. It means that the trade relations of EU and other countries are in jeopardy and unanimity principle may help to keep EU as a trustworthy partner. Quite possible that in the future policy will appear to integrate 5G on all EU countries [6]. 5G will provide more effective communication technologies in transport, data, etc. If just one member state is using not very secure Internet protocols the rest of the members are under threat. Taking into account these risks, some member states will not wish to participate even if the perspectives are very promising. Overall, it shows that EU cannot afford long indecisive policy and ought to take a very clear position in this respect.

The significance of the choice is very articulated. If EU chooses 5G and China it may indirectly mean that, they do a step back from their staunch ally that is the US. Moreover, the situation is very different if to choose US but not China. It will be clear that EU accepts claims to dominate in the world and will show EU loyalty to the US in this very important struggle [7]. If there is a chance for EU to choose the European player, it will allow EU to keep the neutral position and thus status quo.

At the moment when the agreements were being discussed, most influential players in 5G were Huawei, Ericsson and Nokia. Chinese Huawei is the most comprehensive provider amongst three of them. Ericsson and Nokia are North European companies but not so progressive. NOS op 3 claims that Huawei spends 15 billion dollars for research and development annually and in 2019, this sum is two times bigger than of Ericsson and Nokia together. They say that it gives a unique opportunity to Huawei to provide with cheaper 5G. However, the world doubts a lot about safety of this technology as the company is the Chinese one. Researchers of NATO Cooperative Cyber Defense Center of Excellence (CCDCOE) Kaska et al. [8], state that the United States, Australia, New Zealand, Japan and the Czech Republic have already imposed restrictions on using Huawei 5G [8].

They sum up that “the states concerns are rooted in interconnections between Chinese communications companies and intelligence agencies, reinforced by Chinese political and legal spheres, which requires cooperation with intelligence agencies” (Kaska et al. [8], p. 5) [11]. Raud from CCDCOE claims that China has already had a notorious spy reputation. He points out to “academia, industry and government agencies gather technology secrets” (Raud [11], p. 5). Moreover, China has a very strong legislative system to give a powerful support to a national intelligence office. In the Strategist (2018), Hoffman and Kania mention that Article 7 of the China National Intelligence Law states that every organization and citizen must, with high law considerations, support and cooperate in national intelligence activities, keep confidentiality about all national intelligence activities they are aware of. The state protects people and organizations that support, collaborate and cooperate in national intelligence activities (Hoffmann and Kania [6], p. 5) [12].

Hoffmann and Kania say that in legislature, there is no clear definition of intelligence activities and therefore this subject matter may have different interpretations. The conclusion may be as follows, that for such companies like Huawei there are no other options but to cooperate with Chinese intelligence office. Chinese legislation stipulates them to cooperate in their intelligence activities. Kaska et al. [8] research also reveals that Huawei has been accused not but once of spying and violating international economic sanctions against Iran and North Korea. The above-mentioned situations dictate for EU to pursue policy that is more cautious. Megna from EU-Logos Athena ASBL says that the European Commission (EC) requested from member countries in March a security risk assessment report on 5G, without explicit mention of Huawei (2019). Twenty-four member states out of twenty-eight have submitted a report, which generally states that Huawei is a threat. Megna also says that existing European Security Commissioner has not yet informed about any possible bans [9].

The European Commissioner for the Security Alliance, after EC has provided recommendations on how to ensure good security of 5G networks and the need to develop a cybersecurity certificate (2019). Now the position of EU has been eliminated. On April 10, 2019, at the EU-China Summit it was stated that countries would support an “open, secure, stable, accessible and peaceful environment for information and communication technologies (ICT)”. This joint statement claims the importance to follow International legislature for peace and security reasons (European External Action Service, 2019, p. 3).

In addition, they indicate that they are contributing to “the development and implementation of internationally recognized standards of responsible state behavior in cyberspace” (European External Action Service, 2019, p. 3). Gadi (2014) claims that so-called EU-China Cyber Task Force was elaborated in 2012 [10]. He also says that the only benefit of this was mutual distrust reduction. Regarding 5G, the joint statement only mention is that they would like to stay connected and support cooperation in the field of business technology (European External Action Service, 2019, p. 3). It shows that there is no novelty in here. According to the report of December 4 ANP, EU ministers on communications agreed that EU countries should pay attention to the “technical risk profiles of telecommunications companies” plus “legal and policy framework with external 5G providers (Europa Nu (now), 2019, p. 1)” [11].

The conclusion is that these are the minimal steps that have to be taken. In EU, there is still no specific plan or approach for 5G implementation. Megna [9] argues that this is likely due to the situation when European market is fragmented with over 100 telecommunication operators. This makes it difficult to take into account interests of all EU countries. He also points out that only 12 member states are actually preparing to introduce 5G in EU (2019). It shows that in a short-term the whole situation is not probable for the most member states. In addition, according to Megna, Poland is still the only country that seeks to work with the United States to implement 5G, and Belgium and Hungary have already concluded that Huawei does not pose any risk. In other countries, the solution is under the provider (2019) [11].

There is a lot of disagreement about Huawei among member states. This is a central issue in relations with US, which indicates that EU countries should ban Huawei. Interviewee A demonstrates that Huawei should not be overestimated. In a few years, other providers will appear that can provide a network with the same scope. However, European providers will ask for a higher price. Therefore, we can expect competition: “Countries will have a choice,” says Interviewee A. He also points out that Europe is not showing unity on this problem. In particular, Eastern Europe and Italy seem that not benefit much from 5G rapid adoption and therefore will not work quickly with Northern Europe. There is also no consensus in Western Europe. Interviewee A comments that some countries only want it because it is very prestigious from a political and economic perspective. 5G may be a very attractive tool. There may be many benefits for public sector but for businesses it will be more profitable. He adds that Chinese 5G is planned to be distributed via newly updated satellite system. However, for a while, not every EU country have an opportunity to gain access to this system. The Netherlands, for instance, will not have this satellite network until 2022. It means that such countries should not rush to make a decision [13].

Interviewee B has a different vision on the problem. He says that “Companies like Oracle and SAP are pretty pragmatic when it comes to business, so if there is a chance to earn in partnerships with Huawei, they will not miss the opportunity.” There are no any strict restrictions except that all 5G contracts must be formulated and approved by a responsible ministerial department. Interviewee B noted that American Oracle and Chinese Huawei are indeed partners, but it is not very progressive for American and European markets. The documents about the relationships between Oracle and Huawei