



JRC Technical Report: *Quantifying the Benefits of Location Interoperability in the European Union*

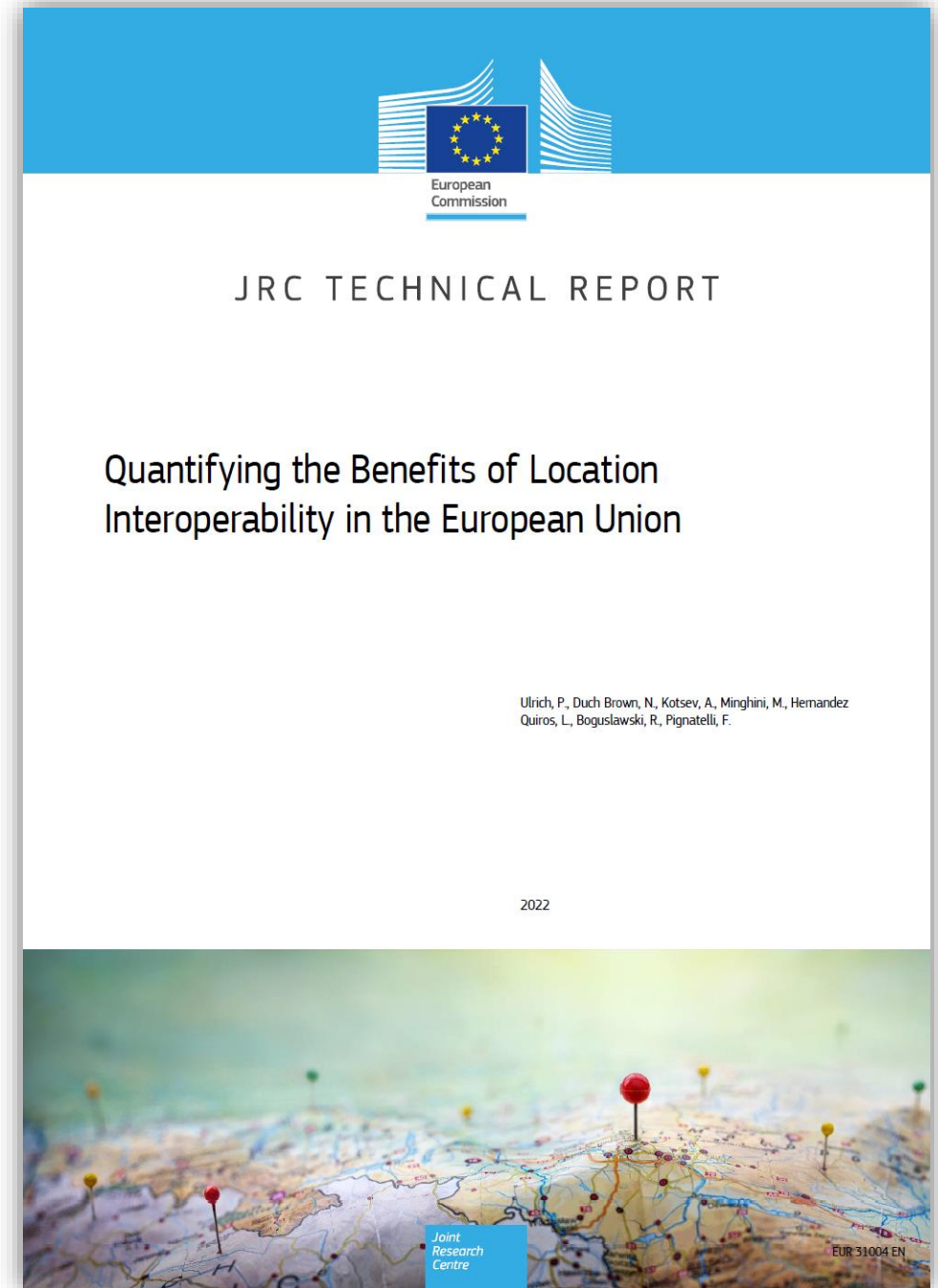
Marco Minghini & Alexander Kotsev

69th MIG-T meeting – April 1, 2022

JRC Technical Report

- Quantifying the Benefits of Location Interoperability in the European Union:
 - published in February 2022
 - authors from JRC B.6: Peter Ulrich, Nestor Duch Brown, Alexander Kotsev, Marco Minghini, Lorena Hernandez Quiros, Ray Boguslawski & Francesco Pignatelli

<https://publications.jrc.ec.europa.eu/repository/handle/JRC127330>



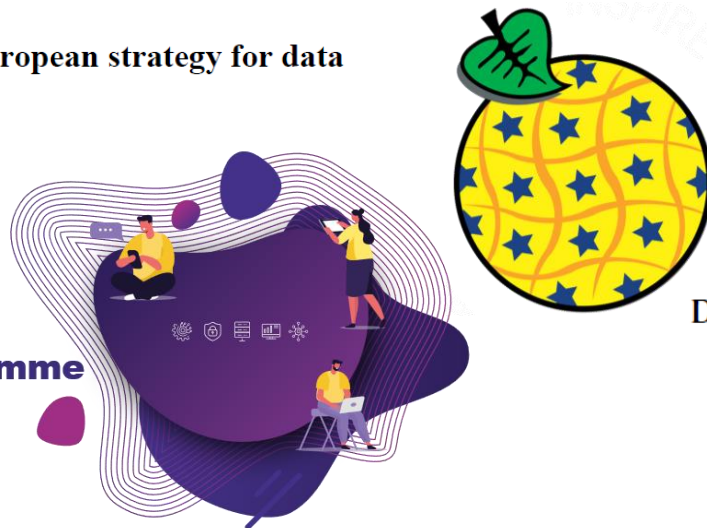
Why? To inform several initiatives



COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European strategy for data

Digital Europe Programme



Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on harmonised rules on fair access to and use of data
(Data Act)

Common European data spaces



DIRECTIVE (EU) 2019/1024 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 20 June 2019

on open data and the re-use of public sector information

(recast)

Interoperable Europe

interoperable
europe
innovation ∞ govtech ∞ community

- A new European Commission initiative for a reinforced interoperability policy in the EU public sector, supported by the Digital Europe Programme:
 - Interoperable Europe Act

<https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe>

Contents

economic impact analysis of location interoperability in the EU

Foreword.....	1
Acknowledgements	2
Abstract.....	3
Executive Summary	4
1 Introduction.....	6
1.1 Policy context of location interoperability	7
1.2 The context of technological developments and changes in location data	8
1.2.1 Internet of Things (IoT).....	8
1.2.2 Citizen-generated location data.....	8
1.2.3 Satellite data.....	9
1.2.4 Private sector location data.....	9
1.2.5 From data collection to data connection (APIs).....	9
1.2.6 Novel architectures	10
1.3 Standardisation for location interoperability.....	10
2 Identifying quantifiable benefits through case studies	12
2.1 Case studies on location interoperability – a deep dive	14
2.1.1 Case studies from EU Member States.....	14
2.1.2 Case studies outside the European Union.....	20
2.2 Conclusions from analysing the case studies.....	24

3 Calculating the economic impact of location interoperability	26
3.1 Economic impact of interoperability in the EU overall	26
3.1.1 The impact on Citizens.....	26
3.1.2 The impact on firms	29
3.1.3 Impact on the public sector.....	33
3.1.4 Total expected impact of improved interoperability	36
3.2 Economic impact of location interoperability.....	36
4 Conclusion.....	38
References.....	39
List of tables and figures	40
Annexes	41
Annex 1. Publications in literature review.....	41

policy and technological context

analysis of the benefits in 20 case studies

Scenarios

- 2 scenarios:
 1. an increase in interoperability would reduce exclusively the time devoted by those individuals already using the internet to deal with the administration
 2. an increase in interoperability would also motivate some new individuals to engage with the administration online

Some conclusions

- Impact of improved interoperability on **citizens**:
 - 25% time reduction leading to time savings of **21-24 million hours** per year
 - annual monetary savings in the order of **EUR 473-543 million**
- Impact of improved interoperability on **businesses**:
 - time savings of **27.6-30 billion hours**
 - annual monetary savings in the order of **EUR 521-568 billion**
- Impact of improved interoperability on the **public sector**:
 - improvements in interoperability that would increase the EGDI by 1% are associated with an **increase of 0.16-0.4% in the GDP**, i.e. **EUR 21.2-56 billion**
- Total annual impact of improved interoperability in the EU: **EUR 432-625 billion**
- Total annual impact of enhanced location interoperability (**50-80% of the total**): **EUR 272-500 billion**

Thank you!



marco.minghini@ec.europa.eu



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.



Keep in touch



EU Science Hub: ec.europa.eu/jrc



@EU_ScienceHub



EU Science Hub – Joint Research Centre



EU Science, Research and Innovation



Eu Science Hub