## **Curriculum Vitae**

#### **Personal information**

Surname(s) / First name(s) VANCAUWENBERGHE Glenn

Home address Mechelsesteenweg 404A

2830 Willebroek

Belgium

Work address Celestijnenlaan 200 E

3001 Leuven Belgium

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Nationality Belgian

Date of birth 14.05.1984

Gender Male

**Education** 

Dates 2007-2013

Title of qualification awarded Ph.D. in Social Sciences

Thesis: "Coordination within the spatial data infrastructure. An analysis of the use and exchange of spatial data in Flanders", 2013, under supervision of prof. dr. G. Bouckaert (KU Leuven, Public Governance Institute,

supervisor) and prof. dr. J. Crompvoets (KU Leuven, Public Governance Institute, co-supervisor)

Principal subjects/skills covered Public administration and policy, research methods, coordination and governance, spatial information,

geomatics, interoperability, geospatial standards

Institution Katholieke Universiteit Leuven, Belgium

Dates 2006-2007

Title of qualification awarded M.Sc. in Management of Public Administrations,

Thesis: "Local social policy in Flanders", 2007.

Principal subjects/skills covered Public administration, management and policy, digital government, performance management, quality

management, strategic management, innovation management

Institution Ghent University, Belgium

Dates 2002-2006

Title of qualification awarded M.Sc. in Sociology,

Thesis: "The position of the Federation of Enterprises regarding the social security system", 2006

Principal subjects/skills covered Sociology, social policy, scientific writing, research design, research methods, case study research, in-depth

interviews, survey design, quantitative data analysis

Institution Katholieke Universiteit Leuven, Belgium

### **Professional experience**

Dates 2018 - Present
Position Senior researcher

Employer Spatial Applications Division Leuven (SADL), KU Leuven

Main activities and responsibilities

Senior researcher engaged in various research, capacity building and consultancy projects in the domain of spatial data and geo-information, focusing on spatial data policies and their performance, the governance of spatial data infrastructures, the integration of spatial data in digital government. Member of the daily management board of SADL, and involved in the acquisition of research funding (internal, national, European, international). Coordinator of the Erasmus+ project SEED4NA and of the SADL team in several projects.

Dates 2016-2018

Position Marie Skłodowska-Curie post-doctoral fellow

Employer Knowledge Centre Open Data, TU Delft

Main activities and responsibilities

Post-doctoral researcher on the topic of governance of open spatial data, investigating different models for governing open spatial data in the Netherlands and the United Kingdom, in collaboration with the UK Open Data Institute and the Dutch Ministry of the Interior and Kingdom Relations. Also involved in the daily management, PhD supervision and teaching activities of the Knowledge Centre and in the acquisition of new – national and European – funding.

Dates 2012-2016

Position Research associate

Employer Spatial Applications Division Leuven (SADL), KU Leuven

Main activities and responsibilities

Post-doctoral researcher dealing with the institutional, organizational and policy aspects of spatial data and spatial data infrastructures, involved in research, capacity building and consultancy projects at national and international level, in close collaboration with other universities, SMEs and larger enterprises and public administrations at different administrative levels.

Dates 2007-2011

Position Research associate

Employer Public Management Institute, KU Leuven

Main activities and responsibilities

Junior researcher and PhD-student embedded in the FWO-SBO-SPATIALIST project, a multi- and interdisciplinary project involving researchers from public administration (KU Leuven), sociology (KU Leuven), economics (VUB), law (KU Leuven) and geomatics (KU Leuven), to investigate the requirements for developing a successful Spatial Data Infrastructure in Flanders. Responsible for the analysis of the public administration aspects of the project, and contributed to the design and implementation of different research activities. PhD-project on the topic of multi-level coordination of Spatial Data Infrastructures.

# Acquired funding and awarded grants

- Erasmus+ Capacity Building in Higher Education grant for the project 'SEED4NA Spatial Data Infrastructures and Earth Observation Education and Training for North-Africa' (EUR 851.485, 2020-2023, main applicant)
- Erasmus+ Strategic Partnership grant for the project 'SPIDER Open Spatial Data Infrastructure Education Network' (EUR 448.585, 2019-2022, contributor to the proposal)
- Specific contract on 'Feasibility Studies on the Use of Remote Sensing in Development Cooperation' under the Framework service contract 'Ecosystem support for Copernicus and the EU space policy' (EUR 119.175, 2019-2020, contributor to the proposal)
- Specific contract on 'ELISE Knowledge Transfer II: Digital Transformation and the future of SDI' under the Framework Contract 'ABC IV Advice, Benchmarking and Consulting services in information and communication technology' (EUR 371.746, 2020-2021, contributor to the proposal)
- Specific contract on 'ELISE Knowledge Transfer: Location Interoperability for Digital Transformation' under the Framework Contract 'ABC IV - Advice, Benchmarking and Consulting services in information and communication technology' (EUR 99.500, 2019-2020, contributor to the proposal)

- Specific contract on 'Copernicus Service Component R&D needs collection and analysis for Horizon Europe and stakeholder consultation' under the Framework service contract 'Ecosystem support for Copernicus and the EU space policy' (EUR 82.750, 2019, contributor to the proposal)
- KU Leuven Multi-Stakeholder Grant for Young Researchers for the project 'Towards and Open Spatial Data Infrastructure in Peru' (EUR 18.180, 2019, main applicant)
- H2020 Twinning grant for the project 'TO DO Twinning Open Data Operational' (EUR 799.988, 2019-2022, contributor to the proposal).
- Amsterdam Institute for Advanced Metropolitan Solutions AMS project grant for the project 'Effective Governance of Open Spatial Data at the local level (EUR 51.201, 2017-2018, main applicant)
- Marie Skłodowska-Curie post-doctoral fellowship for the project 'Effective Governance of Open Spatial Data' (EUR 165.599, 2016-2018, main applicant)

## Research projects

<u>06/2020 – present</u>: Senior researcher for SADL/KU Leuven to the project 'Supporting the development of the Municipal SDI of Abu Dhabi', Abu Dhabi Department of Urban Planning and Municipalities (DPM), in collaboration with GPC-GIS. Contributing to the development of an GeoMaturity Assessment Framework for municipalities, based on existing frameworks and approaches in the domains of GI/SDI and digital government

<u>03/2020 – present</u>: Senior researcher to the project 'The costs and benefits of geospatial web services of the national Spanish SDI-node', CNIG-Spain. Responsible for the design of the study, the collection of data and the analysis.

<u>01/2020</u> – <u>present</u>: Project coordinator and senior researcher to the project 'SEED4NA - Spatial Data Infrastructures and Earth Observation Education and Training for North-Africa', EC DG EACEA, in collaboration with 12 other – European and North African – universities and two non-academic partners. Responsible for the coordination of the project and contributing to skills needs assessments, the design of curricula and the provision of education and training on SDI-related topics.

<u>12/2019 – present</u>: Senior researcher to the project '*ELISE Knowledge Transfer II*: *Digital Transformation and the future of SDI*', European Commission, EC DG DIGIT, in collaboration with Deloitte. Responsible for the design and execution of a longitudinal study on the use of location data for environmental assessments and the preparation and organization of webinars on topics related to location intelligence and digital government.

<u>11/2019 – present:</u> Senior researcher to the project 'Feasibility studies on the Use of Remote Sensing in Development Cooperation', European Commission, EC DG DEVCO, in collaboration with Deloitte. Responsible for the design and execution of several feasibility studies on the use of remote sensing in development aid projects in different regions.

<u>09/2019 – present</u>: Senior researcher to the project 'SPIDER - Open Spatial Data Infrastructure Education Network', German Academic Exchange Service, Erasmus+ Strategic Partnerships, in collaboration with TU Delft, Zagreb University, Lund University and Bochum University. Leader of the study on current SDI education and the development of new active education resources, and contributing to all other project tasks and activities.

<u>05/2019 – 06/2020</u>: Senior public governance researcher to the project 'Elaboration of standards, norms and procedures in the acquisition and dissemination of geospatial information in Mozambique', Government of Mozambique – Ministry of Transport and Communications, in collaboration with Kadaster International. Responsible for the analysis of geospatial production processes through case studies and in-depth interviews, the provision of training on SDI and related topics to decision makers and managers and guidance on the national governance and decision making on geostandards

<u>03/2019 – 12/2019</u>: Project coordinator and researcher to the project '*Towards an Open SDI in Peru*' Multi-Stakeholder Grant, KU Leuven, Leuven, in collaboration with PUCP and D&D International. Responsible for the design and coordination of the project, and contributing to the study on the openness of the SDI in Peru and the development of the action plan.

<u>01/2019 – 02/2020</u>: Senior researcher to the project '*ELISE Knowledge Transfer: Location Interoperability for Digital Transformation*', ABCIV–152, EC DG Informatics, in collaboration with Deloitte. Contributing to the design and development of vocabularies related to digital – geospatial – skills, the update of the EULF Blueprint and several rapid studies.

<u>07/2018 – 05/2019:</u> Senior researcher to the project 'The role of the Spatial Data Infrastructure in the Digital Transformation of Public Administration', ABCIV–68, EC DG Informatics, in collaboration with Deloitte. Contributing to the design of the comparative study, the data collection process and the analysis and reporting of the study results.

- <u>07/2018 present:</u> Senior researcher to the project EO4GEO: "Towards an innovative strategy for skills development and capacity building in the space and geo-information sector to support Copernicus user uptake", Erasmus+ programme of the European Commission, EC DG EACA, in collaboration with 25 other partners. Contributing to the analysis of existing and required skills and competences, the development of the Body of Knowledge, and the development of a governance model as part of the long-term Action Plan.
- <u>07/2016 06/2018:</u> Marie Skłodowska-Curie post-doctoral fellowship on '*Effective Governance of Open Spatial* Data', H2020, EC Research Executive Agency (REA). Responsible for the design of the study, data collection and analysis on different models for governing open spatial data, focusing on the Netherlands and the United Kingdom.
- <u>01/16 06/2016:</u> Researcher in the "Creating a University-Enterprise Alliance for a Spatially Enabled Society (giCASES)" project under the Erasmus+ programme, EC DG EAC, in collaboration with 13 other partners. Responsible for the design and implementation of a survey on the needs of industry and academia with regard to the joint creation, management and sharing of knowledge and contributing to the establishment of a catalogue of best practices on cooperation between industry and academia in GI education and training.
- <u>06/15 06/2016:</u> Senior GI researcher in the CENTRIC project: "Centre of Excellence in TerRItorial management and Cadastre", H2020 Widespread, EC Research Executive Agency (REA), in collaboration with 7 partners. Contribution to the elaboration of the business plan and to the design of curricula and mobility scheme.
- <u>12/14 06/2016</u>: Governance and data policy researcher for the National Mapping Agency of Belgium to review the geo-ICT infrastructure in view of alignment with SDI and INSPIRE requirements, NGI-BE, Brussels, Belgium. Contributing to the interviews with stakeholders at the federal level, analysis of the status of the SDI and future challenges, the development of the ICT-Strategy for the federal geo-platform and the development of the access and use policy for spatial data sets and services.
- <u>01/14 01/15:</u> INSPIRE researcher to the project "Active dissemination of environmental information in relation to the Birds and Habitats Directive", EC DG ENV, in collaboration with Arcadis and ECNC. Contributing to the assessment of the implementation of the provisions of Article 7 of the Access to Environmental Information Directive and the provisions of INSPIRE with regard to information relevant to the implementation of the Birds and Habitats Directives. Contributing to the assessment.
- <u>01/14 06/14:</u> Senior INSPIRE researcher for *the development of the INSPIRE Strategy of Romania*, ANCPI, Bucarest, Romania. Responsible for drafting the strategy based on Best Practices in Europe and working with local stakeholders.
- <u>10/13 11/15:</u> Senior researcher for the *LINKVIT project of the LLP-Leonardo da Vinci programme*, European Commission, EC DG EACEA, in collaboration with 5 other partners. Contributing to the analysis and organisation of the training material and the elaboration of the adaptation plan, and tutor of the sessions "INSPIRE advanced" and "Basics of INSPIRE Data and service sharing".
- 10/13 06/2016: Researcher in the "Geographic Information Need-to-Know (GI-N2K)" project under the LLP-Erasmus programme, EC DG EACEA, in collaboration with 30 other partners. Contributing to the analysis of the demand and supply of the GIS&T-training and education market in Europe and to the development of the new version of the e-BoK.
- <u>01/13 06/13</u>: SDI assessment researcher for the project "SDI benchmarking et retour d'expérience de la mise en oeuvre de la directive INSPIRE", SPW Département de la Géomatique, in collaboration with GIM. Responsible for the elaboration of the methodology, two visits (NL and Flanders) and contributing to the analysis.
- 01/13 12/14 and 06/15 present: Senior researcher to the project "Support for the establishment of a European Union Location Framework (EULF)", EC JRC. Contributing to the assessment, the development of the vision and responsible for the elaboration of the EULF Blueprint and Roadmap.
- $\underline{05/12} \underline{04/13}$ : Researcher in *smeSpire*, a 7th FP project to enhance involvement of SME's in INSPIRE Implementation, EC DG INFSO, in collaboration with 14 other academic and non-academic partners. Responsible for the design and implementation of a study on the activities, skills and knowledge of SMEs in the geo-ICT domain and the contribution of INSPIRE to the innovative activities of these SMEs.
- <u>09/07 12/11</u>: Junior researcher in the framework of *SPATIALIST SDI for Public Sector Innovation*, IWT, Flemish Region, in collaboration with other KU Leuven and VUB research groups. Responsible for the analysis of the public administration aspects of the project, and contributed to the design and implementation of different research activities.

Note: All for SADL/KU Leuven except **E-GOS** (07/2016 – 06/2018) & SPATIALIST (09/07 – 12/11)

## **Teaching experience**

Courses and seminars

Lectures on 'Organisational framework for SDI' as part of the courses I0U99A 'Spatial Data Infrastructures', 2014-2015, 2015-2016 and I0I32A'Geospatial Information Technologies'2019-2020, Leuven.

Modules on various non-technological aspects of SDI under the 'Management track' of the training as part of the project 'Elaboration of Standards, Norms and Procedures in the Acquisition and Dissemination of Geospatial Information in Mozambique', 26-28 November 2019, Maputo.

Course 'Geo-information Organisation and Legislation of the MSc Geomatics programme at TU Delft, 2016-2017 & 2017-2018, Delft (*co-lecturer*).

Module on 'Basics of INSPIRE Data and service sharing', in the context of the LINKVIT vocational training programme, 26 May 2015, Lisbon.

Lecture on 'How free are free data and tools?' in the context of the VLIRUOS-funded Short Training Initiative, organised by KU Leuven / SADL-14, 31 March – 11 April 2014, Leuven.

Seminar on 'INSPIRE advanced' in the context of the smeSpire vocational training programme 2014, 6 February 2014, Leuven.

Assistant to the course on 'ArcGIS-software for starters' for the Flemish Department of Agriculture and Fisheries, 7-11 October 2013, Leuven.

Lecture on 'SDI and coordination' in the context of the SPATIALIST Seminar 'Spatial Data Infrastructures (SDI), latest trends and research', 7-11 November 2011, Leuven.

# Personal skills and competences

Mother tongue(s)

Dutch

Other language(s)

| Self-assessment    | Understanding |                 |    |                 | Speaking |                     |    |                  |    | Writing          |
|--------------------|---------------|-----------------|----|-----------------|----------|---------------------|----|------------------|----|------------------|
| European level (*) | Listening     |                 |    | Reading Spo     |          | oken interaction Sp |    | ooken production |    |                  |
| English            | C2            | Proficient user | C2 | Proficient user | C2       | Proficient user     | C2 | Proficient user  | C2 | Proficient user  |
| French             | B2            | Proficient user | B2 | Proficient user | B2       | Proficient user     | B2 | Proficient user  | B1 | Independent user |
| German             | A1            | Basic user      | A1 | Basic user      | A1       | Basic user          | A1 | Basic user       | A1 | Basic user       |

<sup>(\*)</sup> Common European Framework of Reference for Languages

Social skills and competences

Experience with team work in multi-cultural and multi-disciplinary settings. Experience in working together with people from different disciplines (public management, sociology, ICT-geomatics , law, economists, geographers, planners ...) and different nationalities.

Good communication and reporting skills. Publications in professional and academic journals. Presentations at national and international conferences. Participation in workshops and other consultation events with decision makers, practitioners, researchers, and other stakeholders. Preparation and organization of workshops and other events.

Organisational skills and competences

Experience in project and team management. Good analytical and problem-solving abilities. Ability to assign priorities, plan, manage time, and work with deadlines.

Technical skills and competences

Experience in the design and implementation of research projects. Expertise in quantitative and qualitative research methods, including survey design and testing, interviewing and (statistical) data analysis. Use of different software packages to collect and analyze research data.

Experience in organizational and institutional issues with regard to GIS, e-government and the implementation of Spatial Data Infrastructures (SDI). Background in public management and public policy research, with a strong focus on governance and coordination issues.

## Computer skills and competences

Experience in using mixed computer environments.

- Operating Systems: MS-WINDOWS, OS X
- Statistical software: SAS, SPSS
- GIS-software: QGIS, ArcGIS
- Software for qualitative research: NVivo, ATLAS.ti, fsQCA
- Software for social network analysis: Ucinet/Netdraw, visone
- Other software: spreadsheets (Excel), word-processing (Word), reference management (Reference Manager – Zotero)

#### **Publications**

PhD Thesis

Vancauwenberghe, G. (2013). Coördinatie binnen de Geografische Data Infrastructuur: Een analyse van de uitwisseling en het gebruik van geografische informatie in Vlaanderen. KU Leuven: Leuven.

Articles in internationally reviewed academic journals

Hofer, B., Casteleyn, S., Aguilar-Moreno, E., Missoni-Steinbacher, E. M., Albrecht, F., Lemmens, R., Lang, S., Albrecht, J., Stelmaszczuk-Górska, M., Vancauwenberghe, G. & Monfort-Muriach, A. (2020). Complementing the European earth observation and geographic information body of knowledge with a business-oriented perspective. Transactions in GIS, 24(3), 587-601.

Crompvoets, J., Vancauwenberghe, G., Ho, S., Masser, I., & de Vries, W. T. (2018). Governance of national spatial data infrastructures in Europe. International Journal of Spatial Data Infrastructures Research, 13. International Journal of Spatial Data Infrastructures Research, 13.

Vancauwenberghe, G., Valečkaitė, K., van Loenen, B. & Welle Donker, F. (2018). Assessing the Openness of Spatial Data Infrastructures: Towards a Map of Open SDI. International Journal of Spatial Data Infrastructures Research, 13.

Vandenbroucke, D. & Vancauwenberghe, G. (2016). Towards a new Body of Knowledge for Geographic Information Science and Technology. International Scientific Journal Micro Macro & Mezzo Geo Information, 6, 7-19

Dessers, E., Vancauwenberghe, G., Vandenbroucke, D., Crompvoets, J., & Van Hootegem, G. (2014). Analysing spatial data performance in inter-organisational processes. International Journal of Digital Earth.

Dessers, E., Crompvoets, J., Janssen, K., Vancauwenberghe, G., Vandenbroucke, D., Van Haverbeke, L., & Van Hootegem, G. (2012). A Multidisciplinary Research Framework for Analysing the Spatial Enablement of Public Sector Processes. International Journal of Spatial Data Infrastructures Research, 7, 125-150.

Vancauwenberghe, G., Crompvoets, J., & Bouckaert, G. (2011). Interorganizational Information Sharing as a Driver of Change in Public Administration. The NISPAcee Journal of Public Administration and Policy, 3 (2), 87-106.

Vandenbroucke, D., Crompvoets, J., Vancauwenberghe, G., Dessers, E., & Van Orshoven, J. (2009). A Network Perspective on Spatial Data Infrastructures: Application to the Sub-national SDI of Flanders (Belgium). Transactions in GIS, 13 (1), 105-122.

## Books and book chapters (selection)

Schade, S., Granell, C., Vancauwenberghe, G., Keßler, C., Vandenbroucke, D., Masser, I., & Gould, M. (2020). Geospatial Information Infrastructures. In: Huadong, G., Goodcile, M.F. & Annoni, A. (Eds.), Manual of Digital Earth. Singapore: Springer, pp. 161–190.

Vancauwenberghe, G., & van Loenen, B. (2019). Governing Open Spatial Data Infrastructures: The Case of the United Kingdom. In: Rodríguez Bolívar M., Bwalya K., Reddick C. (Eds.), Governance Models for Creating Public Value in Open Data Initiatives. Public Administration and Information Technology, vol 31. Springer, Champ, pp. 33-54.

Van Loenen, B., Vancauwenberghe, G., Crompvoets, J. (2018). Open Data Exposed. Information Technology and Law Series, vol. 30. The Hague: TMC Asser Press.

Vancauwenberghe, G., & van Loenen B. (2018). Exploring the Emergence of Open Spatial Data Infrastructures: Analysis of Recent Developments and Trends in Europe. In: Saeed S., Ramayah T., & Mahmood Z. (Eds.), User Centric E-government. Challenges and opportunities. New York: Springer International Publishing, pp. 23-45

Vancauwenberghe, G., F. Welle Donker, and B. van Loenen (2018) Business Models for Geographic Information. In: J. Brown Kruse, J. Crompvoets, and F. Pearlman (Eds.), GEOValue; The Socioeconomic Value of Geospatial Information. Boca Raton (US): CRC Press, pp. 85-115.

Vandenbroucke, D., G. Vancauwenberghe, A. Dangol, and F. Pignatelli (2018). Performance Measurement of Location Enabled e-Government Processes: A Case Study on Traffic Safety Monitoring. In: J. Brown Kruse, J. Crompvoets, and F. Pearlman (Eds.), GEOValue; The Socioeconomic Value of Geospatial Information. Boca Raton (US): CRC Press, pp. 297-316

Vancauwenberghe, G. & van Loenen, B. (2017). Governance of open spatial data infrastructures in Europe. In: van Schalkwyk, F., Verhulst, S.G., Magalhaes, Pane, J., Johanna Walker, J. (Eds.), The Social Dynamics of Open Data, African Minds, pp. 63-88.

Vancauwenberghe, G., Dessers, E., Crompvoets, J., Vandenbroucke, D. (2014). Realizing Data Sharing: The Role of Spatial Data Infrastructures. In: Gascó-Hernández M. (Eds.), Open Government. Opportunities and Challenges for Public Governance. New York: Springer, 155-169.

Vancauwenberghe, G., Crompvoets, J., Vandenbroucke, D. (2013). Location information strategies: bringing location into e-government. In: Anthopoulos L., Reddick C. (Eds.), Government e-Strategic Planning and Management. New York: Springer, 65-82.

Vancauwenberghe, G., Crompvoets, J., Bouckaert, G., Vandenbroucke, D. (2011). Social Network Analysis of the SDI in Flanders. In: Nedovic-Budic Z., Crompvoets J., Georgiadou Y. (Eds.), Spatial Data Infrastructures in Context: North and South, Chapt. 6 CRC Press Taylor & Francis Group, 121-135.

Crompvoets, J., Vancauwenberghe, G., Bouckaert, G., Vandenbroucke, D. (2010). Practices to develop Spatial Data Infrastructures: Exploring the contribution to E-government. In: , Practical Studies in E-Government, Chapt. 13. New York: Springer, 229-248

Papers and presentations at international conferences (selection)

Stelmaszczuk-Górska, M., A., Aguilar-Moreno, E., Casteleyn, S., Vandenbroucke, D., M. Miguel-Lago, Dubois, D., Lemmens, R., Vancauwenberghe, G., Olijslagers, M., Lang, S., Albrecht, F., Belgiu, M., Krieger, V., Jagdhuber, T., Fluhrer, A., Soja, M. J., Mouratidis, A., Persson, H. J., Colombo, R. & Masiello, G. (2020). Body of Knowledge for the Earth Observation and Geoinformation sector – A Basis for Innovative Skills Development.. XXIV ISPRS Congress, Commission V and Youth Forum, Digital event, 24 Augustus 2020.

Vancauwenberghe, G., Barbero, M. Vandenbroucke, D. & Lopez Potes, M. (2020). The role of Spatial Data Infrastructures in the Digital Government Transformation of Public Administrations. INSPIRE Conference 2020 – Workshop on Building the European Green Data Space. Virtual conference, 3 June, 2020.

Bruzza M., Tupia M. & Vancauwenberghe G. (2020) State-of-the-Art Applications of Spatial Data Infrastructure in the Provision of e-Government Services in Latin America. ICTS 2020 Bruzza M., Tupia M., Vancauwenberghe G. (2020) State-of-the-Art Applications of Spatial Data Infrastructure in the Provision of e-Government Services in Latin America. ICTS 2020 - International Conference on Information Technology & Systems, Bogota, Colombia, 5-7 February 2020.

Gruijthuijsen, W., Pontes, S., Vancauwenberghe, G., Vandenbroucke, D., & Olijslagers, M. (2019). Understanding skill needs in the EO/GI sector: A job advertisements analysis. 22nd AGILE Conference on Geo-information Science, Limassol, Cyprus, 17-20 June 2019.

Vancauwenberghe, G. (2019). Uptake of EO/Copernicus data for improving the performance of work processes. GEOValue Workshop - Advancing the Understanding and Measurement of the Societal Benefits of Earth Observations, Frascati, Italy, 1-3 July 2019.

Vancauwenberghe, G., Valečkaitė, K., van Loenen, B. & Welle Donker, F. (2017). Assessing the status of Open SDI/INSPIRE in Europe. INSPIRE Conference 2017. Strasbourg, France, 4-8 September 2017.

Van Loenen, B. Janssen, K., Valečkaitė, K. & Vancauwenberghe, G. (2017). Harmonising Open Licences in the European Union. INSPIRE Conference 2017. Strasbourg, France, 4-8 September 2017.

Vancauwenberghe, G., Vandenbroucke, D., & Crompvoets, J. (2016). Analyzing Recent Trends and Developments in the SDI Network. GSDI15 World Conference, Taipei, Taiwan, 28 November – 2 December 2016.

Crompvoets, J., Masser, I., & Vancauwenberghe, G. (2016). The Governance of INSPIRE Implementation. GSDI15 World Conference, Taipei, Taiwan, 28 November – 2 December 2016.

Vancauwenberghe, G. & van Loenen, B. (2016). Governance and performance of open spatial data policies in Europe – What can we learn from the INSPIRE Reporting Process? Open Data Research Symposium. Madrid, Spain, 5 October 2016.

Vancauwenberghe, G. & van Loenen, B. (2016). Governance and performance of open spatial data policies in the context of INSPIRE. INSPIRE Conference 2016. Barcelona, Spain, 26-30 September 2016.

Crompvoets, J., Masser, I. Vancauwenberghe, G., & Pauknerova, E. (2016). Reviewing the EU Member States' Governance of INSPIRE. INSPIRE Conference 2016. Barcelona, Spain, 26-30 September 2016.

Vandenbroucke, D., & Vancauwenberghe, G. (2016). Performance Measurement of Location Enabled e-Government Processes: A Use Case on Traffic Safety Monitoring. AGU Fall Meeting, San Francisco, USA, Taiwan, 12 - 16 December 2016.

Vancauwenberghe, G., Cipriano, P., Craglia, M., Easton, C., Martirano, G., & Vandenbroucke, D. (2014). INSPIRE for innovation and growth in the private sector: views and opinions from key stakeholders. INSPIRE Conference 2014. Aalborg, Denmark, 16-20 June 2014.

Vancauwenberghe, G., Cipriano, P., Craglia, M., Easton, C., Martirano, G., Vandenbroucke, D. (2014). Exploring the market potential for geo-ICT companies in relation to INSPIRE. In Huerta, J. (Ed.), Schade, S. (Ed.), Granell, C. (Ed.), Connecting a Digital Europe through Location and Place. Proceedings of the AGILE'2014 International Conference on Geographic Information Science, AGILE Conference on Geographic Information Science. Castellón, Spain, 3-6 June 2014.

Vancauwenberghe, G., Vandenbroucke, D., Crompvoets, J., Pignatelli, F., & Boguslawski, R. (2014). Assessment of the integration of geographic information in e-government policy in Europe. In Huerta, J. (Ed.), Schade, S. (Ed.), Granell, C. (Ed.), Connecting a Digital Europe through Location and Place. Proceedings of the AGILE'2014 International Conference on Geographic Information Science, AGILE Conference on Geographic Information Science. Castellón, Spain, 3-6 June 2014.

Scientific and policy reports (selection)

Dangol, A., Vandenbroucke, D., Vancauwenberghe, G., Boguslawski, R., Borzacchiello, M.T, Pignatelli, F. (2020). Improving the use of location information in e-government processes: methodology and use case. Luxembourg: Publications Office of the European Union.

Vandenbroucke, D., Vancauwenberghe, G., Boguslawski, R., Pignatelli, F. (2020). Design of location-enabled e-government services. Luxembourg: Publications Office of the European Union.

Gruijthuijsen, W., De Brito Pontes, M.D S., Vancauwenberghe, G. (2019). Skills shortages, gaps and mismatches between supply and (future) demand. EO4GEO Management Report, Report No. D1.5, 1-77.

Barbero, M., Lopez Potes M., Vancauwenberghe G., Vandenbroucke D., Nunes de Lima V. (2019). The role of Spatial Data Infrastructures in the Digital Government Transformation of Public Administrations, Luxembourg: Publications Office of the European Union.

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#### Research interests

#### Research topic

#### Geospatial data (infrastructures) and the digital transformation of government and society

#### Description

Digital transformation refers to the profound changes taking place in the economy and society as a result of the uptake and integration of digital technologies in every aspect of human life. Also governments are using digital technologies to transform their interactions with stakeholders and with each other. These governments have been using geospatial data as part of their policy-making processes for over 30 years, while these data also provide the backbone to a range of online service delivery efforts at all levels of government. It is often argued that geospatial data and technologies are key enablers of the transformation of governments into digital governments. However, a systematic understanding of how geospatial data and technologies contribute to the digital transformation of government (and society) is still lacking. Further conceptual and empirical research is needed to better understand the role of geospatial data and data infrastructures in the digital transformation.

#### Related projects

ELISE Knowledge Transfer II: Digital Transformation and the future of SDI', EC DG DIGIT

'The role of the Spatial Data Infrastructure in the Digital Transformation on Public Administration', EC DG Informatics

#### Related publications

- Vancauwenberghe, G., Barbero, M. Vandenbroucke, D. & Lopez Potes, M. (2020). The role of Spatial Data Infrastructures in the Digital Government Transformation of Public Administrations. INSPIRE Conference 2020
   Workshop on Building the European Green Data Space. Virtual conference, 3 June, 2020.
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- Vandenbroucke, D., G. Vancauwenberghe, A. Dangol, and F. Pignatelli (2018). Performance Measurement of Location Enabled e-Government Processes: A Case Study on Traffic Safety Monitoring. In: J. Brown Kruse, J. Crompvoets, and F. Pearlman (Eds.), GEOValue; The Socioeconomic Value of Geospatial Information. Boca Raton (US): CRC Press, pp. 297-316

#### Research topic

#### From geospatial data infrastructures to data ecosystems

#### Description

Since the 1990s, significant efforts have been made to standardise and harmonise online data-sharing efforts related to geospatial data, through the establishment of Geospatial Data Infrastructures, which are among the largest data interoperability efforts undertaken in many countries and at the European level. Recently, technological, institutional and societal developments have caused these SDIs to shift towards more open infrastructures in which non-governmental actors are embraced as key stakeholders of the infrastructure. it became clear that in order to fully realize the benefits of geospatial data, traditional "one-way street" data sharing practices and initiatives should be replaced by an open data ecosystem, i.e. an approach to data that focuses not only on data accessibility, but also on the larger environment for open data use—its "ecosystem". This move towards more geospatial data ecosystems creates additional challenges related to the governance of the ecosystem, and requires the implementation of new and additional governance approaches and instruments. The main challenge is about how to develop these ecosystems in such a way that they are sustainable and provide value to all stakeholders in the ecosystem, including data providers, users and intermediaries.

#### Related projects

'SPIDER - Open Spatial Data Infrastructure Education Network', German Academic Exchange Service, Erasmus+ Strategic Partnerships

'Towards an Open SDI in Peru', Multi-Stakeholder Grant, KU Leuven, Leuven

### Related publications

- Vancauwenberghe, G., & van Loenen, B. (2019). Governing Open Spatial Data Infrastructures: The Case of the United Kingdom. In: Rodríguez Bolívar M., Bwalya K., Reddick C. (Eds.), Governance Models for Creating Public Value in Open Data Initiatives. Public Administration and Information Technology, vol 31. Springer, Champ, pp. 33-54.
- Vancauwenberghe, G., F. Welle Donker, and B. van Loenen (2018) Business Models for Geographic Information. In: J. Brown Kruse, J. Crompvoets, and F. Pearlman (Eds.), GEOValue; The Socioeconomic Value of Geospatial Information. Boca Raton (US): CRC Press, pp. 85-115.
- Vancauwenberghe, G., Cipriano, P., Craglia, M., Easton, C., Martirano, G., & Vandenbroucke, D. (2014).
   INSPIRE for innovation and growth in the private sector: views and opinions from key stakeholders. INSPIRE Conference 2014. Aalborg, Denmark, 16-20 June 2014.

#### Research topic Assessing and addressing digital – geospatial – skills needs

#### Description

The enhancement of digital skills and competences nowadays is high on the agenda of the European Commission and many member states. Among these digital skills also are the many skills required to work with geospatial data and technologies. Higher education institutions in Europe have been teaching and developing these skills for many decades, continuously updating their curricula and teaching methods. To achieve a better match between the supply of skills and the needs of the labor market, it is essential to gain insight in the skills and knowledge required in the 'geospatial' job market but also in the content and methods of relevant educational programmes and courses. Understanding the (mis)match between the current supply of education and training and the demand for specific skills and knowledge will allow to develop more relevant curricula and adopt more targeted and effective teaching approaches. The development of a common vocabulary on geospatial skills and knowledge is a key tool supporting both the assessment of skills needs and the design of relevant curricula.

#### Related projects

EO4GEO: "Towards an innovative strategy for skills development and capacity building in the space and geo-information sector to support Copernicus user uptake", Erasmus+ programme of the European Commission, EC DG EACA

'SEED4NA - Spatial Data Infrastructures and Earth Observation Education and Training for North-Africa', EC DG EACEA, in collaboration with 12 other – European and North African – universities and two non-academic partners.

#### Related publications

- Hofer, B., Casteleyn, S., Aguilar-Moreno, E., Missoni-Steinbacher, E. M., Albrecht, F., Lemmens, R., Lang, S., Albrecht, J., Stelmaszczuk-Górska, M., Vancauwenberghe, G. & Monfort-Muriach, A. (2020).
   Complementing the European earth observation and geographic information body of knowledge with a business-oriented perspective. Transactions in GIS, 24(3), 587-601.
- Gruijthuijsen, W., Pontes, S., Vancauwenberghe, G., Vandenbroucke, D., & Olijslagers, M. (2019). Understanding skill needs in the EO/GI sector: A job advertisements analysis. 22nd AGILE Conference on Geo-information Science, Limassol, Cyprus, 17-20 June 2019.