FINAL REPORT

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Table of Contents

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2 OpenTransportNet Results

2.1 Scope and Objectives

OpenTransportNet (OTN) was created to address key challenges that hinder the use of geographic information (GI) in Europe. Standards and tools have been identified as two main issues around which these challenges revolve. Standards because they can be difficult to apply in practice, even by experienced users; tools because their features are often inaccessible to non-technical ordinary citizens – the greatest source of innovative potential in every country. OTN's response to these challenges has been the creation of collaborative virtual hubs where everyone from individuals to SMEs to city managers can access harmonised data and visualise it using simple tools. It is expected that insights and informed decisions - key outcomes of this process - would in turn stimulate the demand for and re-use of publicly available information, ultimately creating more opportunities for collaboration and new service creation. To that end, OTN made advances in three key areas: data, technology and innovation. Each area includes a corresponding requirement that OTN met by following a number of steps.
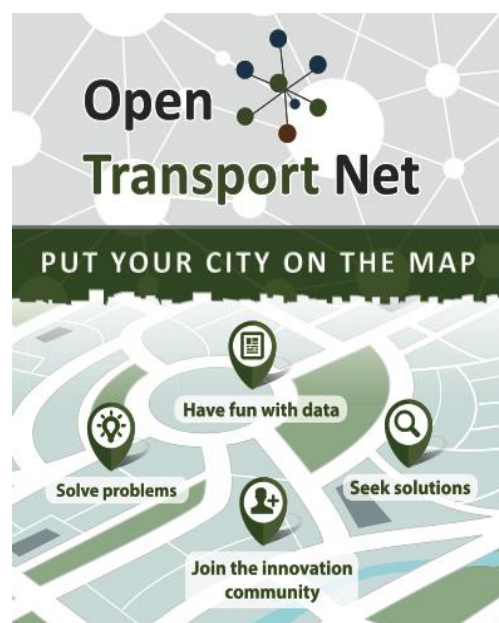
Data - Harmonising data from a variety of sources

- Used existing research, previous project outcomes and end-user feedback to understand the main challenges citizens, cities and SMEs face in exploiting GI for innovation and business purposes

- Collected, processed and aggregated GI, voluntary GI and Open Data from a variety of sources into common, usable, harmonized formats and made them available through OTN Hubs

- Used a set of Semantic tools to enable interoperability between spatial and non-spatial open data sets

Technology – Combining data to extract new information and insights

- Involved end-users in the Hub design process to ensure the platform met their needs and requirements

- Protected the privacy of users through the development of a sophisticated Access Control Management (ACM) System

- Built upon current Open Innovation & GI projects by adapting and integrating existing technical components and methodologies into the OTN Hub and solution

- Visualised full range of GI data using a series of creative layers and applications

Innovation - Provide tools and skills for using GI in rapid service creation

- Deployed the local OTN hubs using a pilot methodology that (a) created a feedback loop for continuous improvement and (b) showed significant impact on the GI ecosystem of a city through cross-border scenarios

- Brought together Sponsors and Innovators through the OTN Hubs and encouraged participation and innovation through a range of engagement activities

- Evaluated the pilots' successes and prepared a sound exploitation plan to ensure the sustainability of project results after the end of the funding period

2.2 Work Performed and Results Achieved

2.2.1 Work Performed

OTN progress in the final year was propelled by a collective effort of all partners who in turn were guided by the tried and tested practices of **WP1** leaders responsible for **Project and Quality Management**.

WP2: Open Innovation, User Requirements & Design was completed in Y2 with no additional activities taking place in the final year of the project. The work package provided a solid foundation on which pilots performed the necessary co-design activities with end users to ensure project outcomes like the Hub and the apps fully meets their needs and expectations. A key takeaway from WP2 is that user-led design process involving the whole stakeholder value chain is key to effecting bottom-up transformation in transport.

Like the previous work package, **WP3: Adaptation of Hub Components** was scheduled to run only in Y1 but was completed in Y2 after the partners resubmitted two deliverables (D3.2 Geospatial Metadata Catalogue and D2.5 Project Architecture Blueprint and Hub Technical Specification) and finalised the adaptation of several Hub components. No additional activities were therefore running in Y3. The work performed in WP3 confirmed the importance of getting Spatial Data Infrastructure right as it directly influences the ability to improve, develop, manage, utilise and maintain geospatial data in transport.

Another work package that officially ended in Y1 is **WP4: Management of Data, Formats, Interoperability and Security**. However, WP4 related activities were running in Y2 and Y3, albeit as part of different work packages. In WP5, for example, WP4 data experts continued their work on the integration of GeoDCAT-AP into the OTN Hub, while in WP6 they helped pilots to harmonise their city data. Furthermore, in keeping with the spirt and letter of the Memorandum of Understanding signed in Y2 between OTN, SDI4Apps, ECIM and Foodie projects, WP4 team continued working on the development of two harmonized datasets: Smart Points of Interests and Open Land Use (OLM).

Using as an input the results of pilot testing activities in Y3, **WP5: Hub Integration** finalised OTN Pilot Mobile Applications and later integrated their outputs into the OTN Hub. WP5 team also synchronised metadata catalogues through ckan2csw module, updated MICKA and HSLayers NG components, redesigned Hub interface using contributions from WP6 and added semantic annotations to all OTN datasets. The work carried out by WP5 team allowed OTN to gain recognition and acceptance in pilot cities and beyond, among experts and non-experts, and contributed to the sustainability of the project by creating exploitable elements that can be used by the great variety of stakeholders, including partners, to entice potential customers, to upskill skill staff, to navigate a city or to simply visualise data for individual use or decision-making purposes.

WP6: Pilot Deployment and Validation continued to play a crucial role in supporting pilot activities in four demonstrator locations: Antwerp (Belgium), Birmingham (UK), Issy-les-Moulineaux (France) and Liberec Region (Czech Republic). Working closely with teams from WP5, WP7 and WP8 in the final year of the project, WP6 leaders organized three Open User Group test rounds and one Proof of Concept cycle while participating in over 60 events locally and nationally. All this effort led to the engagement of more than 800 users! Additional work carried out by the team in Y3 included hosting ad-hoc meeting on metadata standards in Dublin (June 2016) and leading a subgroup on Geo-DCAT metadata in Taiwan (December 2016). WP6 effort over a three-year period is hard to overestimate, as it provided opportunities for a large number of users to generate, from GI/open data, new insights, ideas and transport related services that can be utilised cross-border.

Working closely with the pilots operations team and technical partners, **WP7: Innovation and Evaluation** undertook a number of activities to ensure its period objectives were fully met. They included three Living Lab testing cycles that were assessed using a mix of quantitative and qualitative methodologies and the release of two White Papers and two Hub Manuals. White Paper II focused on the Smart Points of Interests database, the Open Land Use Map and the

guidelines for licensing open data. For its part, White Paper III provided testimonials of the pilot cities and discussed how OTN outputs (e.g. WebGLayer, Datex2) helped cities, both pilots and PoCs, to meet their transport needs. Reflecting on the work of WP7 team over the three year period, one can say without a doubt that it allowed the project to collect systematic insights about the acceptance and value of the project in general and the usability experience and technology acceptance of OTN solution in particular.
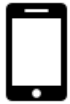
In the final year, **WP8: Communications and Commercialisation** carried on with the tasks it performed in the previous years, but with a more pronounced emphasis on activities aimed at promoting OTN's sustainability post-project. A concerted effort of all partners helped OTN to significantly increase its visibility in professional circles at member state and EU level, as well as internationally. New dissemination material (e.g. leaflets, postcards, brochures), participation in 47 events, publication of more than 40 blog and news articles, 10 newsletters and five academic publications – all went a long way towards cementing OTN position in the open transport data landscape. Furthermore, WP8 team produced a final version of the commercialization plan that outlines a services-oriented, partnership-based sustainability model that some partners will pursue after the end of the project.

2.2.2 Results Achieved

On a **project management level**, most deliverables were submitted on time. On an **impact level**, OTN continued its work on metadata standards and collaborated with projects, both EU and non-EU, and organisations in private and public sectors to disseminate knowledge and maximize the uptake of its results. Also, thanks the work carried out by pilots OTN presence became more strongly felt at a grass-root level where proximity to citizen innovators and SMEs is the closest. On the **sustainability level**, OTN partners made concrete steps to ensure project existence without EU funding. They include a stock-take of partners' competences, development of a revenue sharing model, joining Plan4All association and signing a Letter of Intent for Partnership.

2.3 Final Results, Impact and Use

2.3.1 Final Results

The table below highlights how the results from years one, two and three contribute to the overall expected impact and benefits of OTN.

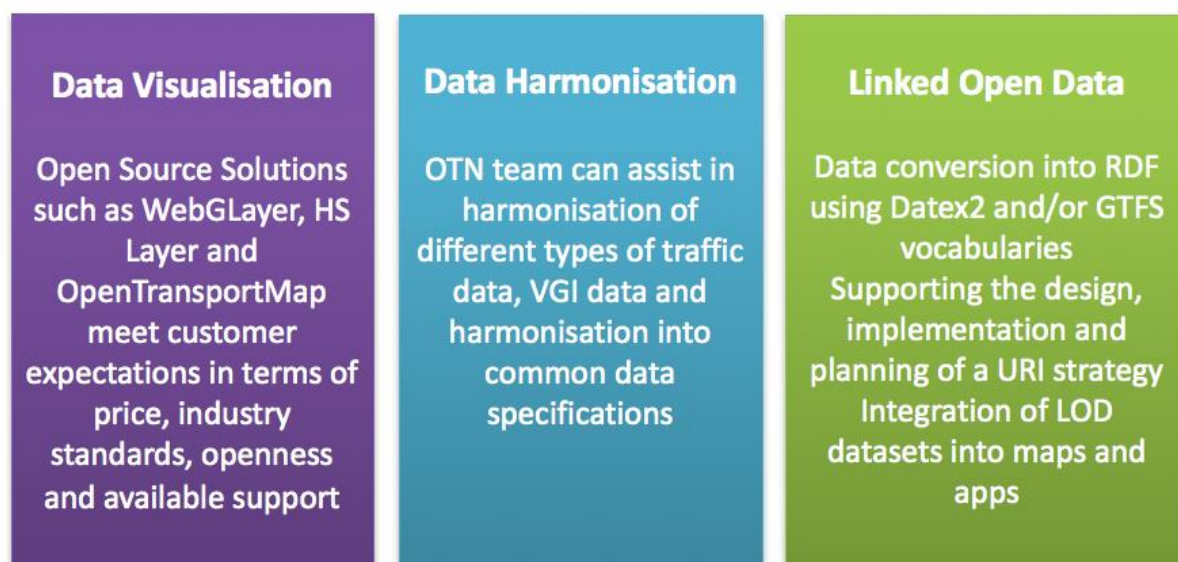| Main Outputs	Main Outcomes	Expected Impacts/ Benefits of OTN	Results achieved in Periods 1, 2 & 3
Practical visualisation tools and easily accessible harmonised data for stakeholders to use to gain new information and insights from open and GI data	**Open Experimentation**	• Advances in standardization processes for combining and viewing spatial and non-spatial data • Greater adoption of GI standardization processes through Involvement of W3C and OGC communities • Enhanced opportunities for all stakeholders to extract greater value from data through linking and analysis	• Participation in joint W3C & OGC working group on the harmonization of metadata and data interoperability. • White Paper I on interoperability and standardisation was written in close consultation with W3C and OGC experts; the experts also assist OTN technical teams in defining and refining use cases, and in finding solutions to technical issues associated with data modelling, data sharing and the testing of Geo-DCAT-AP metadata profile • The production of harmonised datasets that include Open Transport Map, Open Land Use Map and Smart POIs

		• Ability for other domains to benefit from OTNs solution through open source code adoption	• Harmonisation of road networks in Europe http://opentransportmap.info • A user friendly interface has been implemented and further refined based on user feedback, offering a) **citizens** the opportunity to discover, explore, analyse and compose data as well as share data mash-ups, b) **city administrators** specifically designed user interface and options to effectively manage their data c) **developers** the means, repositories and tools to exploit and re-use data, existing services and APIs, all of which can be used for new service creation • OTN open source code, APIs and extensions are available on GitHub where they can be accessed by anyone keen to start experimenting with OTN technologies https://github.com/opentransportnet • OTN Hub also has sections that include a collection of APIs, sample codes, hints and other useful information intended to help third parties adopt and exploit OTN solution
A European wide network for transport innovation to help rapidly and cost effectively develop new services and business activities	**Open Innovation**	• New collaborative ways of working for value chains to deliver innovation using GI and open data • Greater peer2peer business support for the transport network who can share ideas and experiences • Economic enhancements to transport areas such as logistics, safety, emissions etc. through new innovative service • Opportunity for SMEs to cost effectively reach new and wider markets across borders, and across Europe	• Collaboration with projects SDI4Apps, FOODIE and ECIM through MoU; with OGC and W3C through ad hoc working group; and with Plan4All Association through on-going membership of some partners • Services section added to the main Hub where users can contact partners for help with data management, data harmonisation, data visualisation, support, hosting, system integration and different consulting services • Business Support Area of the Hub replaced the Forum due to change of requirements • New services created for pilots and during the hackathon in Birmingham include apps aimed at improving cycling safety and travel experience in a city • Work on optimisation of Riga public transport system that won jury's choice and public choice awards at the Baltic hackathon • Pilsen traffic app built with and for the city to help the authorities better manage traffic flows during construction works on two main highways • Challenges and Marketplace Services sections of the platform allow SMEs to reach new audiences in Europe and beyond

New location-based services that make full use of the potential offered by GI and open data	**New Services**	- Improved capacities for SME's to use GI and open data to develop and validate new ideas and rapidly scale up services and products - Potential for the creation of new jobs and opportunities as a result of the news services and business opportunities - New high quality location-based and therefore more personalised services will improve the quality of life for citizens - Enhanced visibility of the benefits of open GI to encourage data owners to make their sources available	- Final improvements to the Hub allowed SMEs to find GI and non-GI open data; post challenges for their re-use and exploitation via the development of new services; find existing services available on the Marketplace and receive mentoring from the Business Support Area - This development also allows developers to respond to challenges that deal with the needs of particular cities or create new services on a whim using all openly available ingredients such as source code, APIs, extensions and data - Three mobile apps created for pilot cities each of which deals with a specific topic: car accidents (Birmingham), city travel (Issy-les-Moulineaux) and natural disasters (Liberec) - Pilsen traffic volumes that also allows citizens to better manage their journeys during planned construction works on two main highways - Promotion of OTN values and objectives at events, in publications and through other channels slowly but surely contributes to the demand for GI, which in turn adds pressure on data holders to make more of their information publically available - Visualisation of traffic accidents in Flanders using raw data provided by the Belgian police

2.3.2 Impact, Use and Sustainability

For the commercial sustainability of the project, the business model, the unique value proposition (UVP) and revenue sharing model was selected by the OTN partners. Important to mention is that business opportunities have emerged during the course of the project for the WebGLayer (serious business interest from the Belgian company Macq and from the city of Leeds, UK) and for the traffic visualisation (commercial contract in preparation for the Czech city of Plzeň). The real-market experience of the consortium during the three years of the project proved that a complex 'all-round' geospatial data management hub is not a service most potential clients are asking for; they rather seek for advanced and expert services which can be provided on top (or aside) of the hub. Therefore a decision was made to keep and maintain the OTN hub as a marketing channel to support sales of the advanced services provided by the partners.

OpenTransportNet hub will therefore not serve as the OTN's **unique value proposition** but instead, the UVP includes three expert service offerings. One is related to **data visualisation**, another to **data harmonisation** and third **to Linked Open Data**. These three were chosen because OTN had a significant exposure to them during the three years that the project was in existence, because there appears to be an appetite in the market for these types of services – something OTN knows for a fact based on experience with Pilsen, MACQ, Gent and others – and because OTN has developed tools that are best sustained through inclusion in the product portfolio. The appeal of some of these services has already been validated on two potential commercial customers: the city of Pilsen (public sector) and MACQ (private sector).

Data Visualisation

Open Source Solutions such as WebGLayer, HS Layer and OpenTransportMap meet customer expectations in terms of price, industry standards, openness and available support

Data Harmonisation

OTN team can assist in harmonisation of different types of traffic data, VGI data and harmonisation into common data specifications

Linked Open Data

Data conversion into RDF using Datex2 and/or GTFS vocabularies Supporting the design, implementation and planning of a URI strategy Integration of LOD datasets into maps and apps

OTN Unique Value Proposition

An important sustainability steps undertaken by the partners included joining **Plan4All association** (P4A) and signing **a Letter of Intent** (LoI) to continue business relationship after the project. Plan4All is an association that was set-up to sustain the results of finished European projects as well as open data related to spatial and environmental planning. Partners agreed that Plan4All will take over the Hub when the project comes to a close and offered the association a commission on future OTN transactions for its technical support and hosting (the commission rate will vary depending on project type and so will be agreed on a case-by-case basis.) At the time of writing, six OTN partners had already joined Plan4All – University of West Bohemia, HSRS, IS-practice, EDIP, Cen Group Ltd. and 21c Consultancy. Others are interested to further collaborate and support P4A on ad-hoc and project basis.

A service-oriented business model has been chosen as the right choice because the customers showed not just a fleeting interest in OTN's service-based solutions, like traffic volume visualization and advanced data visualizations (WebGLayer), but they actually want to have a lasting commercial relationship with OTN backed up by a contract.

The market OTN is entering is huge (estimates suggest it was worth $3.3 billion in 2016), dominated by services and has many players, big and small, that compete for the attention of public and private sector customers. Most geospatial companies in Europe – around 38% - earn less than €1 million in revenue. Although small scale businesses dominate the market, they are closely followed by a group with revenues in the region of €1-15 million. Closing the chain are large-scale businesses whose revenues exceed €45 million, but they represent only 2% of the total.

European geospatial industry's revenue sources are split almost equally between private (56%) and public (44%). The share of private sector is likely to continue to grow given the continued proliferation of data and its use by industries such as banking, telecom, insurance, logistics, gaming and retail. Public sector, for its part, makes its contribution particularly visible in areas like infrastructure, environment and climate change, disaster management, land use, utilities, public safety and homeland security.

OTN research confirmed that public sector institutions use a wide range of geospatial data, from pointer data (LPS) to environmental to transport statistics. The reasons for using this data are also manifold as few places

use such information for a single purpose. The most common reasons include improving decision-making and service delivery, new service creation, reporting, emergency planning, coordination and raising awareness.

Public sector actors use all - albeit in different combinations - data services provided by OTN, from harmonisation to analysis to support and development. They also exhibit a strong preference towards local providers for reasons that include support for local economy, better cooperation and policy/procurement requirement. The research also found that there is a near unanimous agreement about the prospects for geospatial data and services, with public sector respondents saying both will gain momentum at the workplace, in the economic sector and in the country more generally.

OTN has had more experience working with public sector actors than companies in large part due to user engagement efforts made by local authorities participating in the project. But towards the end of the project the consortium experienced a lot of interest from the private sector; interest that has revolved mainly around visualisation tools such as WebGLayer.

Going forward, OTN developed **a revenue sharing model** that considers things like contact type (direct or via the Hub) and the number of partners involved in project delivery, a management structure that plays to the strengths of each partner involved and a marketing plan that supports business goals of OTN 2.0. All this, combined with the triple service offering, a collection of open source tools and presence in six European cities, gives reason to believe that OTN can make a successful foray in the GIS market.

3 Online Dissemination

3.1 Project Website

The project website constitutes a focal point for dissemination and communication activity. In addition to providing information about the project (including marketing material) for technical and non-technical audiences, it proactively promotes Smart Mobility and Geo-Data news and events from across Europe and engages visitors in interactive discourse. The website is subdivided into 6 main sections:

- Concept section: providing a concise description of the project vision and objectives;
- Consortium section: detailing the partners and their role in the project;
- Documents section: where users can download OTN-related publications, public deliverables or project communication material;
- Blog section: where project and pilot news are regularly posted;
- Contact section: displaying a simple contact form;
- Events section: detailing past/upcoming events attended by/to be attended by Consortium partners.
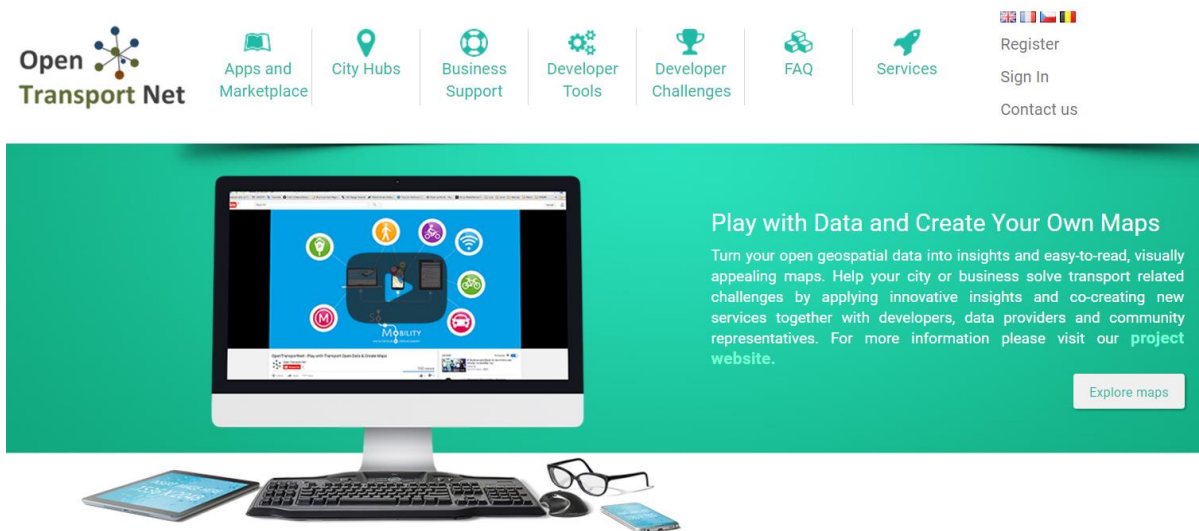

The project website has been regularly updated with news from Consortium partners, upcoming events and dissemination material. Visitors can watch an introductory video and learn more about the newest map compositions by clicking at the provided links. They can also access all Social Media channels such Facebook, Twitter and LinkedIn or just observe Twitter feed available on the website. What is more, visitors can directly like or share articles on their own social media profiles. This function has been used many times proving that the OTN website is visited by interested people and published blog posts are engaging. Quick access to the contact form and subscription to the newsletter is also provided to ease the communication.

The number of visitors and page views has been monitored during the whole duration of the project. In the second year, the numbers doubled from the 1st period reaching 1,542 new and returning users hitting the website 4,720 times. Due to the transition of the project website to the new URL in the third year of the project the most accurate statistics are from April 2016 to January 2017 showing 1,358 new users and 4,235 page views. By looking at this figures, it can be concluded that the traffic remained similar to the second year attracting significant number of visitors to the website. However, one need to remember that the same news has been also published on Social Media channels which consequently reduced the number of website visitors who rather than visiting the project website logged into the OTN Hub.

3.2 The Hub

The Hub has been redesigned few times during the three years of the project after pilot testing and user consultations. The second release of the OTN Hub has been characterised by a user-friendly and interactive interface which allowed users for quicker and easier navigation around the platform. Moreover, features such as Marketplace and Business Support Area were introduced. The Hub became equipped with videos, tutorial as well as map gallery – a repository of created maps. The new version of the Hub was received positively new and returning testers who were impressed with the feel and look of the OTN portal. Feedback received during the workshops and events was confirmed by the growing number of users. According to Google Analytics the Hub has been visited by 4,842 users with 43,314 page views during 10,042 sessions in the last year (15 March 2016- 15 March 2017).

3.3 Newsletters

In order to maximise dissemination and sustainability gains as well as reach new types of audiences since March 2015 OTN has been issuing an official monthly Smart Mobility Newsletter together with another Smart Mobility project – ECIM. Prior to these two newsletters were issued, one in June 2014 and the other one in December 2014 describing early developments of the project. After June 2016 when ECIM project has come to an end OTN continues with the monthly communication. The tool quickly became popular with field specialists and project partners and includes over 100 subscribers (a form is available on the website for those who want to sign up). All editions of the newsletter can be accessed through the website (http://project.opentransportnet.eu/otn/?q=material).

3.4 Videos

There have been two official videos created during the lifetime of the project. They were uploaded on the OTN YouTube Channel (https://www.youtube.com/channel/UCgc34NQz9Nkr4ou4oU0h0xQ) and Facebook fan page and promoted extensively by all project partners.

The first video was created in June 2016 by the Dissemination Team for promotional and dissemination purposes. The video published on the project website and Social Media presents the OTN vision and explains how open transport data is being used in four pilot cities to unleash creativity and drive innovation. By showcasing pilot use cases the video provides a strong message for first time visitors and gives real life examples on how to utilise project results. The video has been already viewed 422 times on YouTube and 237 times on Facebook.

The second video, published on the home page of the OTN Hub had a substantive aim of providing a quick tutorial to the first-time users. The 3 minutes video explains the main features of the OTN Hub and shows how to make a visualisation using open (geo) data or crowdsourced data in transport. Up to now it has been seen by 133 people on YouTube and 49 times on Facebook.

Other videos, such as short coverage from the European Data Forum, promotion of the Inspire Hackathon and visualisation of changes in the traffic in Pilsen after planned workloads have been published on OTN Facebook page.

3.5 Social Media

Social media channels were used extensively on a daily basis to communicate project updates as well as to engage new users by sharing information on the latest developments in the GIS / transport world.

Facebook Page

The OTN Facebook page (https://www.facebook.com/OpenTnet) represents one of the dissemination tools used by the project. Currently, the page counts 343 fans and almost 300 posts have been published since the beginning of the project. According to the page insights the best performing posts showcasing new map visualisations available on the Hub and designed with the Hub tools reached more than 1000 people.

18/11/2016 11:20		Cycling is so popular in the Belgian city of Ghent that some like to c		1.1K	46 21	
17/11/2016 18:57		This week we are presenting our second Android application called		118	4 3	
16/11/2016 13:48		Check out our new map composition for Ghent which shows the cit		53	6 1	
11/11/2016 10:23		Our second visualisation for Liberec this week is a Points of Interest		533	24 20	
10/11/2016 12:52		'City report' is OTN's brand new Android app for #Birmingham (UK) t		43	0 1	
09/11/2016 17:01		Open Transport Net shared their post.		22	1 0	
09/11/2016 16:51		Flooding is an international phenomenon whose consequences are		1K	33 24	

The Facebook page is constantly updated with news and events related to the project as well as photos and videos, in an effort to attract new audience and keep engaged an existing community.

Twitter

OTN Twitter account (https://twitter.com/OpenTnet) counted by 16 March 2017, 949 tweets. The account is followed by 578 users and this number is constantly growing. Access to the OTN tweets is also available through the project website and Facebook. Twitter is highly used at conferences and events where relevant hash tags and handles are used to attract new followers and promote project's insights. In addition, news from relevant fields such as Smart City, Open Data or transport are shared and discussed with interested stakeholders.

LinkedIn

LinkedIn Group (https://www.linkedin.com/groups/6624260) is the third Social Media channel for the OTN project and consist of 502 members. The OTN LinkedIn group's target audience is slightly more specialised than that of Twitter or Facebook: primarily Consortium partners and their networks, as well as the professional community in general. The group exchange project updates, business insights as well as views on the new trends and developments in the GIS world.

4 Dissemination Activities

During three years of the project the OTN team has attended a significant number of international and local events, organised several workshops and events themselves, presented project results and achievements at number of conferences and seminars around the world. Below section presents the highlights from each dissemination activity in which the partners have been involved. In total there are 64 International Conference and 42 National Dissemination Activities.

4.1 International Dissemination Activities – Conferences

This section presents, in a chronological order, the international conferences and events attended and hosted by the consortium partners during the 36 months of the project.

21c officially launched OTN as a new project (even before the official kick off) at the ITAPA 2013 International Congress: Putting IT Together on the 11th November 2013 in Bratislava, Slovakia. Julia Glidden delivered a keynote speech during the session "Global Trends in Smart Transportation" discussing how OTN project will combine GIS & Open Data to improve transport related public services. More than 500 State Counsellors, Director Generals of ministerial IT departments, State Secretaries, Directors of IT departments, Head of Service Offices, politicians, businesses and academic took part in the Conference.

The second OTN public appearance took place at the event called Data Days Open Europe (18February 2014, Ghent, Belgium) organised jointly by **21c** and **Antwerp**. A presentation in the plenary session to Open Data policy makers, city managers, students and developers allowed for knowledge sharing with other data projects and promotion of the OTN vision.

Being at the Transport Research Arena 2014 for four full days (14 – 17 April 2014) gave the project a unique opportunity to share their views and ideas with more than 3000 visitors from around the world (56+ countries). Partners **Intrasoft** and **Issy** shared an exhibition space to promote the OTN solution to multitude of stakeholders from across Transport sectors and industries.

Onthe12[th]of June 2014, **Issy** organised a project presentation as a part of the Futur-en-Seine Festival, on the theme 'European projects: boosters for Innovation?' in Paris, France. All Consortium partners were present and supported knowledge sharing between European data projects such as Citadel on the Move, ECIM and CitySDK. One of the meeting results was an agreement for greater collaboration.

OTN represented by **HSRS** was present in Aalborg, Denmark at the 8th INSPIRE Conference 2014 (16-20June 2014) to share its experiences during the workshop session on 'Open Data for Stimulation of SME Businesses in Agriculture, Transport, Tourism and Environment'. The aim of the workshop was to exchange views and knowledge between different projects dealing with geospatial open data, to show how current INSPIRE based SDIs can be made more accessible for SMEs for developing their applications in different sectors. The audience ranged from policy makers to GI software developers.

Eric Legale from **Issy** delivered a speech on the power of Open Data and promoted OTN's vision and objectives at the Smart Data Forum, on the 25th June 2014 in Nice, France. By talking to data specialists, practitioners, academics, City representatives and businesses **Issy** helped to increase visibility of OTN in Smart City field, evidenced by an increase in social media followers.

21c joined Open Living Labs 2014 - EnoLL Summer School from the 2nd to 6th of September 2014 in Amsterdam, Netherlands to exchange thoughts and ideas with 200 innovators & Living Lab practitioners. It was very successful event with many interactive workshops and site visits. OpenLivingLab Days was a wonderful opportunity to present OpenTransportNet to various stakeholders from around the world including delegates from Institute for Information Industry – Taiwan, Smart City Lab – Estonia, VU-University – Netherlands, Future Everything and Manchester City Council – the UK, Cité du Design – France, Barcelona City Council – Spain, Krakow Technology Park – Poland, Eurocities – Belgium and many more.

18th Int. Conference on Information Systems for Agriculture and Forestry "ISAF 2014" was attended by **UWB** and **HSRS** between the 15th to 17th of September 2014 in Jelgava, Latvia. The team presented the project during the event and took part in the Hackathon winning two prizes for the application visualizing Traffic Volumes.

CORVE participated in the "Journées de la mobilité intelligente" event in Lille, France from the 18th to 19th of September 2014. The event brought together key actors in public/private transport in a series of roundtable meetings therefore **CORVE** had a chance to personally introduce OTN to the stakeholders and distribute brochures. The outcome of this meeting included an interest from Lille in being a possible 'Proof of Concept' site for the project.

INTRA travelled to Casablanca, Morocco between the 23rd and 26th of September 2014 to join 220+ cities, policy makers, urban planners, mobility experts and politicians at the CIVITAS Forum Conference 2014. Thanks to this event, new partnerships have been made with similar initiatives and CIVITAS network.

21c was at the Digital Action Day on the 29th of September 2014 discussing change and advancement in digital technologies and its effect on traditional EU industries and policy areas. OTN was presented during the knowledge sharing workshop bringing together European digital leaders and industries

21c Managing Partner, Susie Ruston McAleer was invited to address delegates at Italy's largest Smart Cities conference, Smart Cities Exhibition Bologna 2014 (22 - 24 October 2014) on the topic of using open data to deliver smart mobility across Europe. Sharing a panel with mobility experts from Rhiental, Brussels, the Oxford Internet Institute as well as the host city Bologna, Susie introduced OTN as a solution for aggregating, harmonising and linking GI and open data in a way so that it could be easily understood and interpreted. The talk concluded with Susie inviting the 70+ delegates to follow the

development of the project on social media. As a result, meetings with Italian engineering companies was set up for November 2014.

OTN was presented by **21c, Issy** and **ISP** during the Global Forum: S7 Citizen-Centric Smart Cities to 200 strong audience of policy makers, influencers, academics and SMEs. The event that took place between 17th to 18th November 2014 in Geneva, Switzerland contributed greatly to the network enlargement.

In November, **Issy** spent four busy days in Barcelona, Spain at two different events to promote the OTN project. First from the 17th to 18th of November 2014 Issy took part in the round table presenting the project to 15 people from other Cities as a part of the City Innovation Summit. Then, personally introduced OTN to stakeholders and distributed brochures at the Smart City Expo World Congress (18 – 20 November 2014).

CORVE was invited by the Association of Local Government Information Management to give a presentation during the 34th International ALGIM Conference titled 'Smarter Local Government' which was held on the 24 - 26 November 2014 in Auckland, New Zealand. It was an opportunity to hear and see the latest innovations being undertaken throughout Local Governments as well as discuss upcoming trends and opportunities of public sector digitization. Taking this opportunity **CORVE** introduced the project to the international audience and invited local governments to follow OTNs journey and set up their own Hubs.

ISSY was at the International Living City Conference in Luxembourg on the 26th of November 2014 for a project presentation to public and private stakeholders in Smart City domain.

Transport Ticketing Global 2015 Conference & Expo was attended by **CEN** between the 27th to 29th January 2015 to promote the project among representatives from global transportation firms and government departments. **CEN** personally introduced OTN to stakeholders and distributed brochures.

Jan Ježek from **UWB** held a paper presentation at the 5th International Conference on Information Society and Technology (ICIST 2015) in Kopaonik, Serbia from the 8th to 11th of March 2015. The paper was warmly accepted among ICT-oriented researchers and practitioners and helped to raise awareness about OTN and disseminate early OTN knowledge.

Another paper presentation was delivered by Pieter Heyvaert from **iMinds** at ESWC 2015 in Portorož, Slovakia between the 31st of May and 4th of June 2015. The event was a great opportunity to increase awareness about OTN and promote OTN intellectual capital to the standards professionals and data & GIS experts.

Issy organised a Smart Mobility Conference on the 16th of June 2015. It was the second time when **Issy** promoted OTN to the international audience at its flagship event. The round table moderated by Julia Glidden from **21c** introduced the project to transport professionals, decision makers and innovation experts. It also helped to forge synergies with European smart city initiatives and promote OTN values. After the event Issy TV promoted the event and OTN project via its YouTube channel. Watch the video featuring interviews with OTN Consortium here (https://youtu.be/MkRjUOLv950).

UWB, CCSS, HSRS travelled to Rio, Brazilfor the prestigious 27th International Cartographic Conference (23 -28 August 2015). Czech partners delivered a paper presentation to the Cartography and GI science experts raising awareness about the OTN and promoting intellectual capital & synergies with similar initiatives.

From the 14thto 15th of September 2015 UWB and HSRS were in Dresden, Germany to attend ISAF2015 Conference. The event was full of activities including Open Data Hackathon for Agriculture, Forestry, Environment, Tourism and Rural development, GI 2015 Workshops & Club of Ossiach Networking Event. Attendees disseminated the OTN knowledge and results to build strong partnerships with other GI experts.

Geert Mareels from **CORVE** presented OTN to public sector professionals at the Forum Europe on the 22nd of September 2015 in Brussels, Belgium. Following the release of the Digital Single Market Strategy and timed to take place during the Commission's preparations for their new E-Government action plan, this conference provided a platform for debate at a key stage for feeding into policy thinking in the area.

Issy, ISP and **21c** took part in yet another edition of the Global Forum between the 28th and 29th of September 2015 in Oulu, Finland. Having its own booth and participating in the round table discussions allowed Eric Legale, Hugo Kerschot and Julia Glidden to exchange contacts with European ICT initiatives and increase awareness about the project.

7-8 October 2015 was all about the OTN project as it was presented by Jan Martolos, AnetaRapacz and Carina Veeckman (**UWB, HSRS, 21c, iMinds**) during the Geomatics in Projects 2015.The event was a brilliant occasion to present current state of the project and introduce participants to the concept of smart cities and open innovation. As it was highlighted by 21cthe availability and accessibility of Open GIS Data can further transform European businesses and public services by helping citizens to make informed decisions and innovate with data. OTN is on the road to bolster this trend by providing easy to use map visualisation tools that can bring more people in the world of GIS.

OpenTransportNet was presented by **21c** Managing Partner, Susie Ruston McAleer, to an audience of future city vision and strategy experts at the ITS World Congress in Bordeaux, France on October 8th, 2015.The ITS World Congress and Exhibition is the world's largest event in intelligent transport systems (ITS) and services. With the theme, "Towards Intelligent Mobility – Better Use of Space," the Bordeaux Congress focused not only on how achieving intelligent mobility will change our lives, but also on the benefits it can bring to intelligent transport systems applications. Over 11,000 delegates visited the conference and exhibition this year over 4 days. **21c** and OTN were proud to have a conference paper published on the theme 'Are Open Data and Big Data Transports Silver Bullets?' with the ability to present its work during an Open Data panel.

INTRA joined the annual CIVITAS Forum Conference 2015 from the 7th to 9th October 2015 in Ljubljana, Slovenia. This year INTRA team shared project brochures with other attendees and held discussions on the OTN vision and with transportation experts and interested stakeholders.

Geert Mareels from **CORVE** travelled to Leicester, UK to speak at the SOCITM conference (19 - 20 October 2015) the leading public sector ICT event, with over 400 delegates debating how local public services can use technology to fundamentally transform complex interactions with citizens. OTN case was presented and city representatives invited to join the growing network of City Hubs.

A team of two from the **University of West Bohemia** (Jan Jezek and Frantisek Kolovsky) won the third place in a GIS Cup that was held in Seattle, Washington, US, on the 3rd to 6th of November 2015 as part of 23rd International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL 2015). The conference is a premier annual event that brings together internationally recognised professionals with the aim of fostering interdisciplinary discussions and research in all aspects of geographic information systems. The Cup is also held annually and is quite competitive. This year's event saw a number of international teams taking part in a competition whose theme focused on finding the shortest path under polygonal obstacles. **UWB** solution impressed the judges because its algorithms were among those that offered the best performance in terms of speed and accuracy.

From 16th to 17th of November 2015 Pavel Kogut (**21c**) was in Luxembourg at the European Data Forum. EDF is an annual event where industry professionals, researchers, policy makers and members of the community initiatives can come together to discuss the challenges and opportunities of Open, Linked, Big and other types of data in Europe. In the poster area where OTN was displayed alongside other European data initiatives Pavel had many opportunities to showcase the project's objectives and achievements to EDF participants. The audience was particularly impressed by WebGLayer, a data analysis and visualisation tool developed by Jan Jezek from UWB.

Matteo Satta representing **Issy** was in Barcelona between the 17th and 19th of November 2015 for the Smart City Expo World Congress, a worldwide event that attracts many different stakeholders, from companies to municipalities, keen to explore and present the latest innovative solutions for contemporary cities. At the World Congress Matteo could be found in the French Pavilion where a dozen of other French cities involved in Smart City projects were present. During the event **Issy** was engaged in knowledge sharing and networking activities with other European cities, companies and initiatives. Issy paid a visit to the municipality where they had an opportunity to present OTN together with two other projects – So Mobility and ECIM – to the professionals working in the city's Mobility Department.

On 18-19 November 2015 OTN partners Lieven Raes from **CORVE** and Ari Apteker from the **City of Antwerp** attended Manage IT conference where they presented the project to an audience of ICT professionals from Europe and beyond. In his presentation Lieven talked about the efforts project partners make to inject open data principles into transport domain, while Ari focused more on recent developments in his municipality,

one of which was the launched of Antwerp Bike App that uses crowd-sourced information to measure and improve road quality in the city. During the networking session both partners discussed opportunities for cooperation with similar initiatives that, if successful, will help OTN disseminate its results and knowledge not just in the four pilot areas but also other places in Europe.

Between 1st and 3rd of December 2015 Geert Mareels and his team from **CORVE** presented OTN to over 60 participants at a workshop that was organised as part of HP-sponsored event - Discover 2015 London. Discover 2015 London is the ultimate technology event where thousands of professionals gather to discuss latest developments in IT and related fields. In his presentation Geert talked about OTN and its progress in introducing Open Data principles to the transport domain. Geert's speech grabbed the attention of many participants who then talked to Geert during the networking session about possible avenues for future cooperation.

Pavel Hájek, Dmitrij Kožuch, Agris Šnepsts and Frantisek Kolovsky (**HSRS, Exigen**) were in a team that came first in the Baltic Open (Geo) Data Hackathon that took place on 16-18 March 2016, Riga, Latvia. Using data from a range of sources (Riga Open Data portal, Open Transport Map, Open Land Use Map), and taking inspiration from the Second OTN White Paper, OTN partners created a demo application that can help optimize public transport in the Latvian capital. Using bus links, their segments and individual bus stops, and taking into consideration such things as land use, people density and road infrastructure in the area

surrounding the bus stop, the team was able to perform the initial analysis and start work on the optimization of public transport aimed at making the latter more efficient and enjoyable for everyone.

OTN partner **CEN** was in Dubai on 29-31 March 2016 for the second edition of Internet of Things Expo (IoTx). **CEN** was among 6000+ visitors who attended the event that included everything from technical workshops to hackathons to networking sessions. At IoTx **CEN** shared his experience with OTN and encouraged Smart City, transport and data professionals to become the project's prospective adopters and ambassadors.

Between 28 January and 31 March 2016, **Issy** organised an App Challenge, called **API Contest**, enclosing the OTN Hub as one of portals to be used to retrieve data for the contest. In this framework, various communication activities have been done, in collaboration with the ECIM project and local project So Mobility, such as presentations, press releases and social

network activities. Furthermore, a final event was held on April 13 at a local cultural facility (Le Temps des Cerises).

On the 28th of April 2016 OTN partners from **iMinds, CORVE** and the **UWB** manned a booth at iMinds Conference, showcasing the project to a crowd of 1000 attendees including professionals working in IT, academia, transport and policymaking, to name just a few. Passers-by were invited to play with WebGLayer and OTN hub. All testers were asked to leave feedback on their

experience through a questionnaire. Many of them gave a high usefulness score and provided valuable recommendations for further improvement. A new case study with the city of Turnhout was discussed.

CORVE, IMEC and Antwerp were at the Trefdag Informatie Vlaanderen in Belgium on the 9th June 2016. The OTN team presented the project and advanced visualisations with the data of the Province of Antwerp to the Public administrations (national, regional, local level) and specialists in open data.

OpenTransportNet represented by **CORVE** and **21c** joined forces with the Transport LAB Hackathon, an online transport hackathon running from the 1st to 14th of June 2016. The Hackathon offered everyone a chance to contribute to a more efficient and eco-friendly world of transport and logistics. The hackathon was focused on three themes: Performance, Planning and Visibility. Both project exchanged information and knowledge during the conference calls and promoted each other via their local communication channels increasing visibility and awareness of not only two projects but also open transport data.

On Tuesday 14th of June 2016 OTN participated in #HackTheTraffic conference organised by **Issy**. The event kicked off with a round of presentations on (Big) Data and its application in traffic management. Among the presenters was Aneta Rapacz from **21c** who introduced the project in front of a packed audience and explained OTN's main tools and apps. OTN also had a stand that was manned throughout the event. Around 150 people from private and public sector such as cities of Brussels, Copenhagen, Lyon, Bologna, Turin, GPSO Cities, Paris Region and companies including Cisco, Colas, RATP, EIT Digital, ISEP, Ericsson, Transdev attended the Conference. Most of them stopped by to look at the video, take a brochure, ask questions about maps and visualisations and initiate dialogue on future cooperation.

On the 22nd of June 2016 in Dublin, Ireland OTN hosted a four-hour ad-hoc meeting on metadata standards as part of an ongoing cooperation with Open Geospatial Consortium. Lieven Raes (**CORVE**), Pieter Colpaert (**iMinds**) and Stepan Kafka (**HSRS**) each delivered a presentation on the way OTN integrates geospatial and non-geospatial metadata to 60 GIS specialists. In the last months of the project the group will focus its attention on the evolving nature of existing metadata standards like (geo) dcat with the aim of making (meta)data more discoverable regardless of its type e.g. classic dataset, (geo) web service or an API.

Between 22nd and 24th of June 2016 OTN partner Karel Charvat of **HSRS** was in Austria for AgriFuture Days 2016 conference where he gave a presentation, participated in parallel sessions and ran a workshop with data and farmers.

Inspired by the success of last year's participation, OTN decided to attend EDF for the second time. From the 29th to 30th of June 2016 Lieven Raes (**CORVE**) and Ari Apteker (**the city of Antwerp**) manned a stand where they talked to passers-by about the project, its tools and data. The event proved to be a success resulting in great interest from similar businesses and public services including Belgian Police.

During two days in July (13-15 July 2016) the seven-strong OTN team was in Patras for MedHackathon where partners (**INTRA, ATC, HSRS, UWB**) performed several different roles and tasks, including presentations and mentoring. As a supporter of MedHackathon OTN brought to the event not only its human resources but also data and tools. Before the actual hack started developers had a chance to learn about the available datasets, different Hub components, WebGLayer visualisation library and, of course, the prizes on offer. In the end, prizes (Arduino, RPi, drone) went to two teams that proposed unique solutions to problems in the areas of health and tourism.

Issy presented the project to an international audience of fifty students and representatives of the prestigious EIT Digital during its Summer School on the 21st July of 2016. Open discussion that followed the presentation increased the awareness about the project and encouraged people to try the Hub for themselves.

From the 9th to 10th of September 2016 OTN was showcased to local residents at the Association Forum event that took place in Issy Digital Space. Matteo Satta from **Issy** was there to man the stand and answer passers-by's questions about the project. While at the stand Matteo also invited all those who showed interest to test the Hub and 'This Way' app, play with OTN tools, check out available map compositions, create their own maps and leave feedback.

On the 16th of September 2016 Lieven Raes of **CORVE** was in Kista, Sweden, for CISMOB Interreg Europe conference. During a morning slot dedicated to Smart Cities, Lieven presented Flanders Region's experience with open and transport related data and tools. In his presentation Lieven mentioned how OTN, with its focus on open innovation, has been used by the city of Antwerp to engage citizens and improve public service delivery.

In the second half of September 2016 **Issy-les-Moulineaux** was celebrating European Mobility Week with over 2000 other cities keen to promote smart and sustainable transport solutions. A number of stands and information points were dotted across the city, offering citizens a chance to keep abreast of the latest mobility related developments. In places where OTN team represented by **Issy** was present citizens could learn about and test OTN crowdsourcing application 'This Way.'

On 19-20 September 2016 OTN partners Jiri Bouchal (**ISP**), Hugo Kerschot (also **ISP**), Eric Legale (**Issy**) and Susie Ruston (**21c**) travelled to Eindhoven, Netherlands to participate in Global Forum 2016, an annual gathering of experts from different countries, continents and policy fields. Jiri and Hugo presented OTN and the latest Pilsen traffic volume visualisation to the audience at the Smart City sessions and Eric shared the experience of Issy-les-Moulineaux dealing with transport problems, including with the help of OTN. OTN also had a stand which it shared with the now finished project ECIM.

Few days later, from the 23rd to 25th of September 2016 Lieven Raes (**CORVE**) and Hugo Kerschot (**ISP**) joined hundreds of other GIS enthusiasts in Brussels for State of the Map 2016 conference. Organised by OpenStreetMap, the event brought together many international experts from different parts of the world, including India and the US. Hugo and Lieven both delivered presentations to packed audiences at special sessions focused on transport, and both manned a stand where passers-by could learn more about the

project and test its Hub, data and tools. WebGLayer, an advanced visualisation tool developed by OTN, was evaluated positively by many conference participants, as well as established market players like MapBox who was the event's gold sponsor.

OTN joined forces with its two partner projects FOODIE and SDI4Apps to help run the first ever INSPIRE hackathon (26-27 September 2016, Barcelona, Spain) focused on volunteered geographic information (VGI) and Citizen Observatories. The hackathon was organised so that results from the first five Citizens Observatories (Citclops, CITI-SENSE, WeSenseIt, CobWeb, Omniscientis) could be transferred to new adopters, such as GROW, SCENT, Ground Truth 2.0 and LandSense. Other aims of the hackathon included the promotion of re-use of existing data and tools, including those produced and developed by EU projects like OTN, Foodie and SDI4Apps.

As in the previous years, INTRA joined the annual CIVITAS Forum Conference. The 2016 edition took place between the 28th to 30thSeptember 2016 in Gdynia, Poland. INTRA team shared project brochures with policy makers, urban planners and mobility experts and presented project results to the international audience raising awareness of the project and its technology.

Between 5th to 6th of October 2016 OTN team from **ISP, EDIP** and **UWB** were in Pilsen, Czech Republic, for Geomatics in Projects conference. On the first day, Hugo Kerschot (ISP) presented OTN to packed audience eager to hear about transport data services and how they can make cities smarter and more responsive to citizens' needs. On the second day, Jiri Bouchal (also from ISP) showcased advanced

visualisation of Pilsen traffic volumes at a special session dedicated to the city's transportation system. The session was moderated by Jan Martolos (EDIP) and included presenters from UWB who spoke about traffic intensity and the different ways it can be analysed.

CORVE was in Brussels, Belgium at the ITS Conference on the 6th of October. By having a booth filled with brochures and presentations, CORVE presented the project to over 300 Belgian ITS specialists.

On the 13th of October 2016 OTN enjoyed celebrating the results of the 2016 Digital Challenge at a prestigious dinner event hosted by The Earl of Erroll in the UK House of Lords. The awards ceremony was the culmination of a year-long program. Starting with an open call for nominations for exceptional and innovative public sector ICT projects, OTN (represented at the event by **BCC, CORVE and 21c**) was delighted to be shortlisted as awards finalists. The project then faced an independent judging panel that assessed all the project submissions to decide the winners. Being called up to be awarded second place in the Open Data category made the OTN's team night.

On the 20th of October 2016 **Issy** hosted a Dutch delegation which included representatives of smart cities like Eindhoven. Eric Legale, Matteo Satta and other colleagues from the city administration used the opportunity to present initiatives that help Issy-les-Moulineaux advance its smart city vision. Among those presented to the guests from the Netherlands was OTN. The Dutch visitors learned about the

role OTN plays in promoting Issy-les-Moulineaux's open data policy and how its tools, namely the Hub and 'This Way' app, help to engage citizens and improve public service delivery.

Transport Infrastructure Conference 2016 was attended by **EDIP** between 21st and 22nd of October 2016 in Prague, Czech Republic to share the experience with the use of open data for transport modelling. The event was a great opportunity to put OTN in practice and present to a variety of stakeholders how the tools and data can be used in real life.

UWB presented OTN, SPOI and OLU projects to the INSPIRE National Contact Points at the 34th MIG-T meeting (INSPIRE), 25-26 October 2016 in Ispra, Italy. The event increased awareness around the outcomes of the projects and showcased the possibility of combining INSPIRE and VGI data.

EDIP attended the 7th Conference of Transport, Health and Environment between the 7th and 8th November 2016 in Brno, Czech Republic. The EDIP team made a presentation of the use of transport modelling when planning sustainable mobility Pilsen using OTN tools as an example. Further collaboration with the Pilsen city is envisaged in this area.

For the third time OTN participated in the Smart City Expo World Congress in Barcelona, Spain, November 15th – 17th 2016, showcasing project results and exchanging ideas with more than 16.688 visitors. By sharing the booth with projects such as Open & Agile Smart Cities (OASC) and SELECT4CITIES, OTN (represented by **21c**) had an unique opportunity to engage with a variety of stakeholders and invite city representatives to join the network of OTN Hubs.

Early December Lieven Raes from **CORVE** travelled to Taichung (Taiwan) for the OGC TC meeting. OTN and CORVE (Information Flanders) are leading the Metadata DW subgroup on Geo-DCAT metadata. We work together with a group of 60 worldwide experts of which OTN is a part. The aim of the subgroup is to integrate GIS metadata standards and open metadata standards to have one integrated (open)data catalogue.

On the 8th of December **CORVE** manned a booth together with Information Flanders at the Manage IT conference in Belgium. 350 IT specialists from the local Flemish communities came to the event to exchanges their views and experiences. OTN brochures were available and **CORVE** presented and discussed the project with each attendee personally.

UWB together with **HSRS** is planning to organize an event where OTN tools will be used to test GEOSS infrastructure. The project will be part of Geoss Architecture Implementation Pilot 8 (AIP-8). The main of this activity will be to increase visibility of OTN, including through GEOSS events and regular weekly teleconferences. The exact time and place is to be confirmed.

4.2 National Dissemination and Networking Activities

The section below chronologically describes the local level dissemination actions undertaken by the consortium partners: networking meetings, workshop presentations, etc. during the 3 years' period of the OTN project.

HSRS and **EDIP** held a meeting with the Ministry of Transport of Czech Republic about the future cooperation on transport apps on the 27th of March 2014 in Prague, Czech Republic. The aim was to promote OTN vision and objectives to a government department, exchanged contacts and laid the foundation for future cooperation.

ISSY presented the project to delegation of 30+ Chinese leaders from universities, government institutions, local authorities and private companies during the "Rencontres Franco-Chinois sur la Smart City" event on the 28th of March 2014 in Issy, France to raise awareness around project and other EU Smart City / Mobility initiatives.

HSRS took an opportunity to introduce OTN at the SD4Apps Consortium meeting and forge close working relationship with the consortium to strengthen bilateral networking and dissemination activities. The meeting with 37 participants took place on the 15th to 17th April 2014 in Catania, Italy.

21c attended the Franco-British Bilateral Workshop on ICT in Future Cities, organised by the French Embassy in London on the 14th and 15thof May 2015 to establish new contacts with other invited guests including UK Minister of State for Universities and Science, representatives from Future Cities Catapult and Institut Carnot as well as leading French and British smart cities (Paris, Lyon, Nice, London, Glasgow, Bristol, among others).

ISSY meet with 50 public and private stakeholders, connected to the theme of Smart Cities and Smart Mobility during the "Atelier Mobilité et Numérique / Cap Digital etMov'eo" event on the 16th of September 2015 in Paris, France. The meeting resulted in greater awareness around the project and begin to solicit involvement in future pilots/trials.

UWB and **EDIP** held presentation of the project to share the objectives and tackled problems with other EU projects and international partners during the Geomatics Conference in Šťáhlavy, Czech Republic from the 1st to the 2nd of October 2014. The event was a good opportunity to introduce first results to the Czech audience.

Open Data Day was held in Brussels, Belgium on the 3rd of October 2014. **CORVE** joined other companies, organisations, developers and entrepreneurs who daily deal with open data to discuss recent development in the OpenData field.

Week later (6-9 October 2014) **CORVE** joined similar event titled Open Days - 12th European Week of Regions and Cities to take part in the panel discussion: 'Open Data: technical torture or a case of 'Appy ever after?' The event was a great opportunity to capture lessons learned and findings from other projects such as Citadel, eCreate, CitySDK.

21c was invited to join Franco-British Transport Conference 2014 on the 14th of October 2014 in London, UK to present OTN project to transport stakeholders and French Embassy in London. 200 participants from City

officials (Paris, London, and Strasbourg), private sector leaders' major consultancies and financial institutions came for the conference.

On October 22nd 2014 Eric Legale from **Issy**, visited China to present OpenTransportNet's concept and objectives to over 20 senior managers from the Leshan City. City representatives included members of the government as well as companies involved with electronics and hi-tech innovation. The following day (23rdof October 2014), Eric spoke about OTN at Chengdu's SME Forum (Capital City of Sichuan, China). Around 100 people from French and Chinese companies and authorities, learned more about the power of GI data and were invited to follow the progress of the project via social media.

EDIP presented OTN during the 22.Silniční conference Olomouc (22nd Road Conference Olomouc) the most important conference on road topics between the 22ndto 23rd of October 2014 in Olomouc, Czech Republic. The presentation was featured in the Conference proceedings and made available to 800+ delegates – municipalities, administration, traffic engineers and SMEs.

Issy hosted a webinar with the Intelligent Community Forum members on the 30thof October 2014. OTN solution was presented to the business and cities representatives not only from Europe (Paris, Eindhoven, Stockholm) but also from Toronto (Canada), Dublin (Ohio, US) and city of Riverside (US). This was an excellent opportunity to discuss aims of the project and brainstorm new ideas.

On the 19th of November 2014 **Issy** presented the project to around 200 public and private stakeholders, connected to the theme of Smart Cities and Smart Mobility during the DigiWorld Summit 2014. The event helped to enlarge the network and establish strong OTN brand presence.

UWB and **HSRS** were in Prague, Czech Republic for the OTN poster presentation at the Inspirujme se (Czech and Slovak INSPIRE Conference). The poster generated greater awareness about the project in academic and INSPIRE circles as the event was attended by the key players in the field of geoinformation, mainly public administration.

BCC participated in the Intelligent Mobility event in the West Midlands on the 6thof July 2015 in Birmingham, UK where it introduced OTN to the conference participants (private and public sector mobility and ICT experts) during breaks and networking sessions.

BCC organised a workshop presentation delivered by Andrew Radford at the Innovation Birmingham event on the 8thof October 2015. The event led to synergies with Innovation Birmingham, Transport Catapult and Centro.

Issy hosted Chinese city officials on the 20thof October 2015 in Issy, France to discuss SmartCity and Smart Mobility Solutions and also to explore potential expansion of OTN beyond the scope of original solution.

Between 24-25 of October 2015 OTN represented by **21c** and **BCC** participated as Silver Sponsors in **BrumHack**, a 24 hour student hackathon that was attended by more than 150 students from across the UK. The event was run as a hack in the Major League Hacking UK Fall season, and was held for the third time by the organisers, three Birmingham University Students. Students had 24 hours to build innovative and catchy apps using sponsors' data and APIs. Two students from Aston University decided to use Birmingham real time traffic data to build PrimeMover, an app that calculates the best available route and even allows users to pay for it using BrainTree, an online payment company. There was also a student from Birmingham University who created a fun game called ResourceFrogger. The game is written entirely in Java and is a frogger-type

game in which the player must cross a series of roads while avoiding being hit by a car. OTN historic data flow was used to populate roads that user needs to cross. As an acknowledgement of their hard work all students received a prize – a Raspberry Pi 2 kit – and an invitation to collaborate on similar projects in the future.

On the 10th of December 2015,**21c**attended a data visualization workshop for SMEs in London, UK to showcase OTN solution and exchange ideas and knowledge on state of the art solutions.

Issy represented by Matteo Satta and Anais Laurent presented the project to the University students during the ISEP Mid-year Student Workshop on the 6thof January 2016.

Between the 11th and 13th of January 2016 OTN project partners met their counterparts from **SDI4Apps project and** WWW Consortium **(W3C)** to take stock of joint activities and agree on the action points for the months ahead. On day one participants discussed OTN's first White Paper and how to improve its weight as a policy advice document. They also talked about OTN's cooperation with OGC and W3C and the integration of Open Transport Map into the OTN Hub. On the following day the focus of attention shifted to the second White Paper and the way in which Smart Points of Interest and Open Land Use Map can be used in OTN. The final day of the meeting was dedicated to cooperation with SDI4Apps and in particular its API which can be used to improve generic text search, route calculation, data visualisation and offline map accessibility.

On the 18thof January 2016 OTN was presented to around 150 GIS enthusiasts who gathered at the premises of the Czech Association for Geoformation to hear about latest developments in the field of open geospatial data. Karel Charvát from HSRS drew audience's attention to the buoyant cooperation between OTN and projects like SDI4Apps and FOODIE and emphasised the importance of such cooperation in sustaining EU-funded projects after the official lifecycle. Following workshop discussions, the participants agreed that, on a technical level, harmonisation, development of the so-called data pumps and establishment of periodic updates are key to ensuring data projects' survival in the competitive market without EC support. And since well-maintained and up-to-date datasets can significantly extend the added value of finished EU projects membership of non-profit entities like Plan4All Association can offer a particularly promising path to sustainability.

On the 17th of February 2016 OTN was in Klatovy, Czech Republic where it joined two other EU projects (SDI4APPs and FOODIE) for a workshop dedicated to Open Data and its use in public administration. OTN solution – Open Transport Map – was presented to the audience by Pavel Hájek, a GIS specialist **UWB**.

Issy has met again with students from the Engineering School ISEP on the 19th of February 2016 to test the revamped OTN Hub. Six students who attended the data jam were split in two groups and each group was asked to make three visualisations for Issy-les-Moulineaux from the available datasets. The data jam was part of API Contest organised by the city and it presented students with an opportunity to learn more about transport situation in the Paris region.

OTN was in Italy from the 22nd to 23rd pf February 2016 for a workshop organised as part of Danube Reference Data and Services Infrastructure initiative. The event was held at the Joint Research Centre in Ispra and attracted a large number of participants from data, GIS and related fields. Štěpán Kafka from **HSRS** presented the Geo-DCAT application profile and its implementation in the OpenTransportNet data hub.

On the 4th of April 2016 Issy hosted a delegation of the Wallonia parliament, this was an occasion to talk about innovative solutions used in Issy. On this framework, Matteo Satta and Eric Legale presented the OTN solution (Hub and This Way app) and gave an overall presentation of the project and its impact on the City.

On the 5th of May 2016 OTN partner Steve Cross from **CEN** gave a presentation about the project to an audience of transport professionals who gathered at the spring edition of Mobility Seminar organised by Centro, a public transport authority for West Midlands. In his speech Steve focused on the latest developments in OTN, such as Riga bus system analysis, and the tools that any city can use to optimise their transport network.

Lieven Raes from **CORVE** attended the 14th edition of ShoptIT conference (12 May 2016)dedicated to digital innovation in public services. At the event Lieven presented Antwerp Data Bikers OTN app and talked about the project more generally during the networking session that concluded the conference.

On the 27th of May 2016 **HSRS** took part in a joint meeting that was held in Florence, Italy and brought together three other ICT projects: Energic OD, SDI4APPs and FOODIE. At the meeting project partners discussed ways in which current and future results can be shared, recycled and put to good use, as well as steps that are necessary to forge cooperation in the areas of metadata and map compositions, among others.

On the 21st of June 2016 Matteo Satta from **Issy** presented OTN alongside other projects to a So Mobility Group of companies (8 in total), including Ericsson and Transdev, a French-based international private public transport operator. In his presentation Matteo focused on OTN crowdsourcing application 'This Way'.

Issy organized a booth with presentation of the Hub and the 'This Way' application for its citizens during the Association Forum Participants between the 9th and 10th of September 2016. There were thousands of visitors and at least one hundred stopped by the booth to learn more about the project. Twenty-eight people subscribed for the Smart Mobility Testers Group and agreed to help with future tests.

On Friday 16th of September 2016 Jiri Bouchal (**ISP**), Jan Martolos (**EDIP**) and Karel Jedlička (**UWB**) paid a visit to Pilsen municipality in the Czech Republic where they showed advanced visualisation of Pilsen traffic volumes to the city's IT department. The visualisation was prepared in light of planned construction works that are expected to affect traffic on two main roads linking suburbs with the city centre. Using this web application users can see how the traffic flow will respond to changes in transport infrastructure, namely (a) the narrowing of Karlovarska street to one lane, (b) the closure of Mikulasska street and the simultaneous occurrence of (a) and (b). The city's IT department was very impressed with what OTN partners had shown them, so much so that they even shared the visualisation on Facebook a few days later. In the coming weeks the visualisation will also be promoted through the city's website and will even be presented at the press conference dedicated to Pilsen's smart city strategy.

Lieven Raes (**CORVE**) and Thimo Thoeye (**City of Ghent**) attended Mobility Data Dive in the Belgian city of Ghent on the 10th of October 2016. The event was organised with the aim of helping the city source original ideas and apps that can improve urban mobility. Lieven presented OTN as a potential solution for Gent's needs, one that can make the city's mobility services smarter and more citizen-centric.

On the 11th of October 2016 Pieter Colpaert (**imec**) gave a presentation on 'Maximizing the reuse of Open Transport Data' at a workshop organised by SocialCar, the new H2020 research and innovation project. In his presentation, Pieter talked about his work on RDF ontology for the Linked Datex2 specification and how it has been used within the context of OTN project.

Jiri Bouchal (**ISP**), Jan Martolos (**EDIP**) and Karel Jedlička (**UWB**) attended a press conference dedicated to Pilsen's smart city strategy. The event brought together many high-profile professionals from transport, ICT, data, development and other related fields, and was hosted by the mayor himself, Martin Zrzavecký. OTN's advanced visualisation of Pilsen traffic volumes was presented by the city's IT director, Ludek Šantora. The

presentation left many participants impressed with the project's capabilities and its potential to advance Pilsen's smart city vision and resulted in an intense coverage in local news media and social media.

OTN's visualisation (prepared by **ISP, UWB, EDIP & HRSR**) Pilsen Traffic Volumes won the seventh place in the Open Data 2016 competition organised by the Otakar Motejl Fund. The Fund facilitates transformation of public administrations in the Czech Republic so that citizens, businesses and civil society organisations can benefit from more efficient and more transparent services. This year's competition saw 30 innovative solutions that in one way or another use Open Data to improve public service delivery, but only 10 made it into the top list. OTN's solution impressed the judges with its innovative approach to visualisation of (open) traffic data, and because the map has a real-life application – Pilsen authorities will be able to use it to regulate traffic flows on two main roads during the planned construction works. Pilsen citizens can also use the app to better plan their commute during the road works to avoid streets with heavy traffic, for example by using tram instead of a car.

On 25-26 November 2016, OTN UK partners Andrew Radford and Shabana Everton, both from the Birmingham City Council (**BCC**), attended a two-day hackathon organised by the local authority in association with ODI Birmingham, TfWM, Innovation Birmingham and ITS-UK. The event brought together around 60 developers, experts from many different fields, including transport planning and computer science, who had an opportunity to work in teams to address current transport related challenges, among them how to make real-time, multi-modal journey planning a reality across road and rail for the West Midlands. OTN is pleased that its data (real-time UTMC data provided by BCC) was used by a winning team to create 'Birmingham City Open Data under Threat,' a solution which provides data visualisation of traffic flow in the Birmingham area and an online dashboard showing congestion spots. After the hackathon two students declared that they will consider setting up a company to analyse transport data.

Following first experiences with them, **Issy** visited again (13 December 2016) ISEP Engineering School with a dedicated 2 hours class on Open Data and OTN, showing to students-developers the Hub and This Way app and explaining the added value of the project for the City. This class took place again on January 17, 2017 and it will be done, together with a challenge, during the second semester for a class of Business Intelligence.

On January 20, 2017, **Issy** organized a workshop (http://issymedia.wixsite.com/data, in collaboration with So Mobility and ROUTE-TO-PA projects, with around 50 participants around Big Data. The OTN Hub and This App was presented in the framework of City Big Data strategy of the City and it will exchange with various local stakeholders, such as Cisco, Transdev, Colas, ISEP, UTC (Sorbonne University) CNRS and Opendatasoft.

HSRS with collaboration of **UWB** and **IS-practice** organised the OTN Open Data Roadshow on the January 23, 2017 in Prague, Czech Republic. The OTN team presented multiple OTN results (software solution, traffic volumes apps and WebGLayer heatmaps of traffic accidents) to 90 stakeholders from both public and private sector to build business relationship.

On 24 January, 40 participants joined a workshop in Antwerp where the results of the OTN project were presented. The focus of the workshop was to communicate the results to various stakeholders and interested parties, and to hear their feedback. Participants from the mobility departments of several Flemish cities, other governments and various organizations and companies joined a very interesting feedback session. The workshop was organized by the Flemish partners in the OTN project: **CORVE, IMEC, IS-Practice and the cities of Antwerp and Ghent.**

4.3 Publications and Press Coverage

4.3.1 Publications

The Three OTN Geographic Information Innovation White Papers are currently also in review process for publication in the academic journal "Open Geospatial Data, Software and Standards":

Veeckman, C., Jedlička, K., De Paepe, D., Kozhukh, D., Kafka, Š., Colpaert, P., Čerba, O. Geodata Interoperability and Harmonization in Transport: A Case Study of Open Transport Net. In Open Geospatial Data, Software and Standards. Springer. 2016. ISSN: 2363-7501. Accepted for publication.

Veeckman, C., Čerba, O., Raes L., Mildorf, T., Jedlička, K., Kozhukh, D., Stott, A. Data harmonization, interoperability & licensing in Open Transport Net project. In Open Geospatial Data, Software and Standards. Springer. 2016. ISSN: 2363-7501. In review.

Veeckman, C., Ježek, J., Jedlička, K., Kozhukh, D., Radford, A., Hájek, P. The WebGlayer: Fast Interactive Visualizations of Big Multidimensional Data in Transport. In Open Geospatial Data, Software and Standards. Springer. 2016. ISSN: 2363-7501. In review.

In addition to these, multiple publications have been published:

Partner(s) Short Name	Dissemination Level	Title of Paper	Publication Type	Source	Date	Link to Paper	Audience
UWB	European	Open Transport Net – Reusing Geographic Data in the Transport Domain	Abstract in conference proceedings	Tribune EU	October 2014	Link	Data scientists, GI & transport experts
EDIP	National	Data useful for solving traffic-engineering problems (translated from CZ)	Journal article	Dopravnilnzenyrstvi	1st issue 2014	Link	Traffic and engineering professional as well as general public
UWB, EDIP	International	Visual analytics of traffic-related Open Data and VGI	Conference paper	5th International Conference on Information Society and Technology (ICIST 2015)	8-11 Mar 2015	Link	ICT oriented researchers and practitioners
iMinds	International	Merging and Enriching DCAT Feeds to Improve Discoverability of Datasets	Book chapter / conference paper	The Semantic Web: ESWC 2015 Satellite Events	31 May – 4 Jun 2015	Link	Standards professionals, data & GIS experts
UWB	International	Dynamic Visualisation of Volume of Traffic	Conference paper	27th International Cartographic Conference 16th General Assembly	23-28 Aug 2015	Link	Cartography and GI science experts, commercial cartography representative, academics and

							students of Geo-information
UWB, CCSS, HSRS	International	Integration and Visualisation of Tourism Data	Conference paper	27th International Cartographic Conference 16th General Assembly	23-28 Aug 2015	Link	Cartography and GI science experts, commercial cartography representative, academics and students of Geo-information
iMinds	European	Evaluating (Geo-) Visualizations in Transport: The Living Lab Approach of Open Transport Net	Conference paper	Geomatics in Projects 2015	7-8 Oct 2015	Link	GIS, transport, data specialists, Living Lab enthusiasts
21c, ISSY, UWB, Exigen, HSRS	International	OTN data hubs: stimulating innovation by improving access to open geographic information	Conference paper	ITS World Congress	9 Oct 2015	Link	Mobility and data experts, user engagement professionals, GIS specialists
UWB, HSRS, EDIP	International	Benefits of Using Traffic Volumes Described on Examples in the Open Transport Net Project Pilot Regions	Journal article	AGRIS on-line Papers in Economics and Informatics	2 Nov 2015	Link	Informatics specialists, computer scientists, researchers, academics
UWB	International	Algorithm for searching a shortest path obeying restricted areas without pre-processing	Conference paper	GISCup of 23rd ACM SIGSPATIAL Conference	3-6 Nov 2015	Link	Data & computer scientists, GIS professionals, Geomatics experts
21c	European	New Tools for Citizen Innovators Promise to Tear Down Europe's Geospatial	Conference paper	European Data Forum 2015	16-17 Nov 2015	Link	Big data professionals, IoT enthusiasts, computer scientists, researchers
HSRS, EDIP, UWB	National	Otevřená Dopravní Mapa	Paper	Gis Ostrava 2016	16-18 March 2016	Link	Traffic Specialists
EDIP	European	Road traffic intensity on the class III roads for the needs of road management regions	Conference paper	Silniční konference 2016 - Road Conference	19-20 Oct 2016	Link	Traffic and transport experts

UWB	Int	Open Transport Map - Routable OpenStreetMap	Conference paper	IST-Africa 2016 Conference Proceedings	2016	Link	OpenStreetMap, GIS experts
UWB	Int	Open Transport Map: open, harmonized dataset or road network	Conference paper	AutoCarto 2016 Proceedings. Cartography and Geographic Information Society	2016	Link	GIS experts
IMEC	Int	Constraints for a large-scale ITS data-sharing system: a use case in the city of Ghent	Conference paper	ITS European Congress 2017	2017	Link	Mobility and data experts, user engagement professionals, GIS specialists
IMEC	Int	Data Literacy for Greater Civic Participation in Smart Cities - Visualising Open Mobility Data	Extended conference abstract	EMAN conference, Liège (Belgium)	27-29 June, 2017	Link	Smart city stakeholders
IMEC	Int	Co-creating innovations for urban mobility: Fostering citizen empowerment and engagement in Open Transport Net	Conference paper	The 12th International Conference on Urban Regeneration and Sustainability, Seville, Spain	18-20 Sept 2017	Link	Both public and private sector stakeholders in the smart city and urban development area

4.3.2 Press coverage

Partner Short Name	Press Source	Press Type	Date	Summary of Activity	URL
HSRS/UWB	Geobusiness journal	Online Article	28 Nov 2013	Brief information about the project objectives published in the Czech language	Link
N/A	Geospacialworld	Online News Article	17 Feb 2014	Description of the project and terms of reference	Link
ISSY	Issy.com	Online News Article	17 Feb 2014	Brief description of OTN & ECIM projects	Link

N/A	Informed Infrastructure	Online Article	17 Feb 2014	Description of project and how it can help solve Europe's challenges related to Geographic Information	Link
ISSY	Urbapress	News Item	12 March 2014	OTN: des applications numériques pour la mobilité	N/A
ISSY	SOdigital	Online News Article	24 Feb 2014	Description of the project and how it fits the idea of Future City	Link
HSRS/UWB	Czech Space Portal	Online Press Release	06 March 2014	Press release from the Kick-Off Meeting	Link
ISSY	Autoroutes de l'Information et Territoires	News Item	20 March 2014	Issy-les-Moulineaux lance le projet 'OpenTransportNet' (OTN) avec 14 acteurs Européens	N/A
iMinds	Agence du Numérique (ex - Agence Wallonne des Télécommunications / AWT	Article	14 March 2014	2ème HackathoneGovWallonia spécial Mobilité	Link
ISSY	Urbapress Information	News Item	1 March 2014	OTN: des applications numériques pour la mobilité	N/A
ISSY	Markess - Blog Administration Numérique	Blog Item	24 March 2014	Transports Intelligents: Issy-les-Moulineaux impliquée dans 2 projets d'envergure européenne	Link
EDIP	The Professional Refereed Journal of Traffic and Transportation Engineering.	Online Article	31March 2014	Information about the project	Link
ISSY	ActeursUrbains	News Item	01 April 2014	Le Projet Open Transport Net	N/A

HSRS/UWB	Czech INSPIRE mailing list	Press release	02 May 2014	Brief information about the strat of the OTN project (Czech language)	N/A
EDIP	The Professional Refereed Journal of Traffic and Transportation Engineering.	Printed Article	18 June 2014	Information about the project and Options of finding and using of several kinds of available data related to transport in the Czech Republic	Link
ISSY	City of Issy-les-Moulineaux	Article	26 Nov 2014	Testez de nouvelles applications pour faciliter vos déplacements en Ville	Link
ISSY	City of Issy-les-Moulineaux	Article	04 Dec 2014	Sharing: the basic ingredient of any Smart City Forum	Link
ISSY	City of Issy-les-Moulineaux	Press release	08 Dec 2014	Journalists and media.	Link
ISSY	City of Issy-les-Moulineaux	Article	08 Dec 2014	Smart Cities: Issy-les-Moulineaux in the European Top 15	Link
ISSY	City of Issy-les-Moulineaux	Article	26 Dec 2014	Testez de nouvelles applications pour faciliter vos déplacements en Ville	Link
21c	Hackathon.com	Article	5 March 2015	2nd ECIM APP Challenge Competition	Link
21c, ISSY	Smart Mobility	Newsletter	17 Mar 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in Q1	Link
ISSY	DirectMatin.fr	Article	19 March 2015	Issy Mayor Mr Santini talks about the project	Link

ISSY	www.issy.com	Article	2 Apr 2015	An article announcing testing cycle in Issy-les-Moulineaux	Link
21c, ISSY	Smart Mobility	Newsletter	21 Apr 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in April	Link
ISSY	Issy Ville	Article	1 May 2015	Comment l'open data et le smartphone peuvent ameliorer les deplacement en ville	n/a
ISSY	Direct Matin	Article	19 May 2015	An article about Issy experience with OTN and other projects	Link
ISSY, 21c	www.issy.com	Article	29 May 2015	An article about OTN entitled 'OpenTransportNet, a project that can mobilise your data!'	Link
21c, ISSY	Smart Mobility	Newsletter	22 Jun 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in May-June	Link
ISSY	www.andreasantini.fr	Article	23 Jun 2015	An article about Issy's conference mentioning OTN's participation in it	Link
ISSY	Issy TV	Video	26 Jun 2015	A youtube video about smart transport projects, including OTN	Link
21c, ISSY	Smart Mobility	Newsletter	27 Jul 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in July	Link
ISSY	SO Digital	Article	17 Sep 2015	An article to have a feedback from users about their needs in terms of data	Link
iMinds	VUB	Brochure	17 Sep 2015	VUB's brochure with a column dedicated to OTN	Link
CORVE	www.lola-ict.org	Article	18 Sep 2015	An article introducing the project and asking for contributions to the questionnaire	Link
ISSY	SO Digital	Article	20 Oct 2015	An article about Issy mentioning its involvement in OTN	Link
CORVE	ec.europa.eu	Article	21 Sep 2015	An article introducing the project and asking for contributions to the questionnaire	Link
21c, ISSY	Smart Mobility	Newsletter	30 Sep 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in August-September	Link
ISSY	Launch of SO Mobility	Press Conference	07 October 2015	Launch of new project on Smart Mobility of Issy, presentation of contribution of OTN	Link 1/2

CORVE	V-ICT-OR	Article	14 Oct 2015	An article briefly introducing the project and promoting the event attended by OTN partners	Link
ISSY	Issy.com	Article	23 Oct 2015	Summary of High Level meeting with Leshan (China)	Link
n/a	Awesome blog	Blog	25 Oct 2015	A blog article about student experience at the hackathon where OTN was present	Link
21c, ISSY	Smart Mobility	Newsletter	31 Oct 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in October	Link
21c, ISSY	Smart Mobility	Newsletter	2 Dec 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in November	Link
21c, ISSY	Smart Mobility	Newsletter	24 Dec 2015	A compilation of project achievements (e.g. technical improvements, events attended, papers published) inDecember	Link
EDIP	Traffic engineering	Article	15 Dec 2015	Information about OTN project and Geomatics conference	Link
HSRS	GeoBusiness	Article	22 Dec 2015	Invitation to the hackathon	Link
ISSY	ISSY.COM	Article	01 Jan 2016	Open Transport Net :unprojeteuropéen pour ouvrir plus de données en matière de transport	Link
iMinds	iMinds Technology Catalogue	Article + demo	N/A	OpenTransportNet Demo	Link
N/A	CORDIS	Project Info	N/A	Project Information	Link
HSRS	Czech geoPortal	Project Info	N/A	Project Information	Link
HSRS, UWB	Research Gate	Project Profile	N/A	Project publications	Link
iMinds	Datex2	Website	N/A	Linked Datex2 vocabulary	Link
21c, ISSY	Smart Mobility	Newsletter	29 Jan 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in January	Link
ISSY	SO Digital	Article	29 Jan 2016	API Contest : lancement d'un concours d'applications sur les transports à Issy-les-Moulineaux	Link
21c, ISSY	Smart Mobility	Newsletter	28 Feb 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in February	Link

HSRS	FOODIE Newsletter	Article	Feb 2016	Memorandum of Understanding between FOODIE and OTN, SDI4Apps and ECIM signed!	Link
HSRS, EDIP, UWB	GIS OSTRAVA 2016	Paper	16-18 March 2016	OTEVŘENÁ DOPRAVNÍ MAPA	Link
21c, ISSY	Smart Mobility	Newsletter	30 March 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in March	Link
ISSY	SO Digital	Article	22 April 2016	L'appli Weev remporte l'API Contest lancé par Issy	Link
ISSY	Issy.com	Article	April 2016	The application Weev wins the API contest launched by Issy	Link
ISSY	Eventbrite	Event invitation	14 April 2016	Workshop Issy-CNRS pour tester deux nouveaux outils dédiés à l'open data	Link
21c, ISSY	Smart Mobility	Newsletter	29 April 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in April	Link
EDIP	Silničníobzor -The Professional Reviewed Journal	Article	May 2016	Determination of traffic volumes in a national context using macroscopic model using macroscopic model	Link
CORVE	VICTOR	PowerPoint Presentation	12 May 2016	The road to digital success The Antwerp Databikers app	Link
21c, ISSY	Smart Mobility	Newsletter	30 May 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in May	Link
CORVE	INSPIRE.EC.EUROPA.EU	Abstract	10 June 2016	Open transport net - Making your transport related open data more useful for your local community	Link
21C	Total Tele	Article	17 June 2016	O2 NextGen Digital Challenge Awards Shortlist	Link
21c, ISSY	Smart Mobility	Newsletter	30 June 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in June	Link
INTRA, HSRS	MedHackathon	Project Info	July 2016	Project Information	Link
ISP	IS practice website	Newsletter	July 2016	Article presenting OTN tools and map compositions	Link
HSRS	LinkedIn	Article	2 July 2016	Go on Open Transport Net Portal and Play with traffic in Paris	Link

HSRS	LinkedIn	Article	3 July 2016	Go on Open Transport Net Portal and Play with traffic volumein Paris II	Link
HSRS	LinkedIn	Article	4 July 2016	Go on Open Transport Net Portal and Play with traffic volumein Paris III	Link
HSRS	LinkedIn	Article	6 July 2016	Go on Open Transport Net Portal and Play with traffic volumein Paris IV	Link
HSRS	CCSS - Czech Center for Science and Society	Article	7 July 2016	Go on Open Transport Net Portal and Play with traffic in Paris	Link
HSRS	WirelessInfo	Article	7 July 2016	Go on Open Transport Net Portal and Play with traffic in Paris	Link
HSRS	LinkedIn	Article	7 July 2016	Go on Open Transport Net Portal and Play with traffic in Paris VI – New social space for sharing transport related data. Join our community!	Link
HSRS	LinkedIn	Article	10 July 2016	Go on Open Transport Net Portal and Play with traffic in Paris V	Link
HSRS	LinkedIn	Article	11 July 2016	Go on Open Transport Net Portal and Play with traffic volume in Paris VI – New social space for sharing transport related data. Join our community!	Link
21c, ISSY	Smart Mobility	Newsletter	30 July 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in July	Link
21c	The Business of Government	Article	7 Sept 2016	OTN as an example of innovative project delivered by EC	Link
ISSY	So Digital	Article	24 August 2016	OTN : l'Open Data au service de la Mobilité	Link
ISSY	LinkedIn	Article	25 August 2016	Open Data serves mobility	Link

N/A	YouTube	Video	13 Sept 2016	Načtenívrstev pro dopravníintenzityPlzně z Opentnet	Link
CORVE	eGovLab	PowerPoint Presentation	16 Sept 2016	Make your city smart using open data, the use of transport related open data in Flanders	Link
ISSY	Issy.Media Newsletter	Article	19 Sept 2016	OTN Needs you – a call for testers	N/A
ISSY	Issy.Media Newsletter	Article	15-21 Sept 2016`	Testezenavantprémiere This Way	N/A
HSRS	Envit	Event Invitation	25 Sept 2016	INSPIRE VGI/Citizen Observatory Hackaton - ENVIP-2016	Link
HSRS	BLBGroup	Event Invitation	26 Sept 2016	A 2-days hacking event inspiring a sustainable environment	Link
N/A	OpenStreerMap OSM323	Article	29 Sept 2016	Weekly newsletter	Link
21c, ISSY	Smart Mobility	Newsletter	30 September 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in September	Link
N/A	EUROPEAN DATA PORTAL	OpenData Info	12 Oct 2016	Project Information	Link
HSRS	LinkedIn	Article	13 Oct 2016	Put Your City on the Map! I –Open Transport Net Hub	Link
HSRS	LinkedIn	Article	14 Oct 2016	Put Your City on the Map! II - Join City Hubs	Link
21c, BCC	NextGen	Article	15 Oct 2016	Winners 2016 – Open Data projects	Link
HSRS	LinkedIn	Article	15 Oct 2016	Put Your City on the Map! III – Eight reasons "Why to use OTN Hub"	Link
HSRS	LinkedIn	Article	18 Oct 2016	Put Your City on the Map! IV – Learn more about our Apps	Link
HSRS	LinkedIn	Article	18 Oct 2016	Put Your City on the Map! V – Learn more about our Apps	Link
ISSY	LinkedIn	Article	20 Oct 2016	OpenTransportNet, un outil pour visualiser le trafic de Paris	Link
ISSY	LinkedIn	Article	21 October 2016	Open Transport Net, navigandonell'open data – introduction to the project in Italian	Link
21c, ISSY	Smart Mobility	Newsletter	30 October 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in October	Link

BCC	Eventbrite	Event Invitation	2 Nov 2016	Birmingham Road Safety and live traffic (UTMC) data workshop	Link
ISSY	LinkedIn	Article	4 Nov 20116	OpenTransportNet, un simple pour créer une carte	Link
ISSY	LinkedIn	Article	10 Nov 2016	Open Transport Net, una mappa in pochi click – second article in Italian	Link
HSRS	LinkedIn	Article	23 Nov 2016	Put Your City on the Map! VI – Dynamic Maps of City of Gent	Link
21c, ISSY	Smart Mobility	Newsletter	30 November 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in November	Link
Gent	Het Nieuwsblad	Article	29 December 2016	KAART. Waar gebeuren de meeste ongevallen in Gent?	Link
21c, ISSY	Smart Mobility	Newsletter	30 December 2016	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in December	Link
21c, ISSY	Smart Mobility	Newsletter	30 January	A compilation of project achievements (e.g. technical improvements, events attended, papers published) in January	Link