Project acronym	BYTE
Project title	Big data roadmap and cross-disciplinarY community for addressing socieTal Externalities
Grant number	619551
Programme	Seventh Framework Programme for ICT
Objective	ICT-2013.4.2 Scalable data analytics
Contract type	Co-ordination and Support Action
Start date of project	01 March 2014
Duration	36 months
Website	www.byte-project.eu

Deliverable D9.4
Dissemination report

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Dissemination level	Public
Deliverable type	Final
Version	1.0
Submission date	21 March 2017

Table of Contents

1 EXECUTIVE SUMMARY

The dissemination report summarizes different actions taken to achieve the dissemination aim and objectives of the **B**ig Data Roadmap and Cross-disciplinar**Y** Community for Addressing Socie**T**al **E**xternalities (BYTE) project set out in D9.1: *The BYTE Dissemination Plan*. True to the project's dissemination strategy, the report provides a comprehensive review of the consortium's work with respect to disseminating project results and findings and engaging stakeholders throughout the project to maximise its impact across stakeholder groups and geographical regions.

2 PROJECT OVERVIEW

The **B**ig Data Roadmap and Cross-disciplinar**Y** Community for Addressing Socie**T**al **E**xternalities (BYTE) project set forth a list of important policy priorities and urgent actions requiring immediate attention to ensure that Europe is prepared to seize the opportunities of big data futures by 2020. The project comprised a three-year, evidence-based research study which adopted a multi-disciplinary, multi-sectoral appoach to investigate the social, economic, political and legislative impacts of big data in Europe. The study was informed by mixed methodology case studies comprising secondary research and extensive engagement in the form of 49 semi-structured interviews and seven focus groups with more than 100 data and domain experts across ten European countries in seven sectorial domains – humanitarian crisis management, culture, energy, environment, healthcare, maritime transportation and smart cities.

Figure 1: The BYTE Case study domains

Based on this work, the consortium set forth a comprehensive, evidence-based, policy and capability planning that will enable key stakeholders, including government officials and managers of European organisations, to respond to the evolution of Big Data futures for maximum effect. The key outputs centrered around the following:

D3.2: BYTE Case study report
D4.2: Report on diminishing negative externalities and amplifying positive externalities
D5.1: The BYTE Vision
D6.1: The BYTE Policy and Resarch Roadmap
D7.3: The BYTE Handbook

Dissemination has been a fundamental element of the BYTE project, hence the disemination strategy ensured that dissemination effort remained an integral part throughout the project effort. The following sections provide in detail a review of the dissermination efforts and outcomes.

3 OVERVIEW OF THE DISSEMINATION STRATEGY AND OBJECTIVES

This section lists the various dissemination actions taken by the Consortium partners to achieve the objectives outlined in the dissemination plan. Dissemination remained live for the project's duration and has been documented in Work Package 9 "Dissemination" including four deliverables

- D9.1: The BYTE dissemination plan
- D9.2: Project brochures, posters and other promotional material
- D9.3: BYTE project showcase
- D9.4: Dissemination report

The dissemination effort peaked around the following key project milestones presented in Table 1 below. Detailed information about each specific dissemination activity is presented in separate sections below.

Table 1. Overview of the dissemination deliverables and milestones

Number	Title	Submission date	Final version
MS8	Launch of the project website	15 Mar 2014	Continuously updated
D9.1	The BYTE dissemination plan	31 May 2014	13 July 2015
D9.2	Project brochures, posters and other promotional material	31 May 2014	20 Nov 2015
D9.3	BYTE project showcase	28 Feb 2017	28 Feb 2017
D9.4	Dissemination report	21 Mar 2017	21 Mar 2017
D9.5	Big data for good	30 Sep 2016	28 Feb 2017
D10.1	BYTE project fact sheet	31 Mar 2014	31 Mar 2014

3.1 AIM AND STRATEGY

A key goal of the BYTE project was to encourage further innovation and economic competitiveness in Europe with respect to big data. Hence its dissemination strategy centred around three key pillars

1) **Broad Reach** the publication and dissemination of project findings and recommendations to a large population of stakeholders,
2) **Involvement** the active engagement of stakeholders in a big data community in order to raise awareness regarding the findings, encourage information exchange and seek their endorsement
3) **Sustainability of** the development of the big data community into a self-sustainable, cross-disciplinary platform that will implement the roadmap and assist stakeholders in identifying and meeting big data challenges.

This general goal resulted in a series of specific objectives and informed a multi-channel and multi-audience Dissemination Plan (see deliverable D9.1 and section 3.2 below for an

overview). In brief, broad reach was ensured by the project's website, which attracted international online traffic, a variety of promotional material (see deliverable D9.2) and a broader media strategy that included press releases, newsletters, sponsorship of relevant events, articles in peer-reviewed journals, presentations in conferences, mass media articles, and social media outreach, and culminated in a final conference in February 2017. Aside the dissemination of research progress and findings, media was also used to invite interested stakeholders to participate in the BYTE Big Data Community (BBDC) (see deliverable D9.3). The dissemination activities culminated with the organisation of a final conference in London, United Kingdom, where the major findings of the project were presented, and formed the basis for setting the roadmap for the community's future activities.

This rest of the dissemination report is organised as follows Section 3.2 describes the dissemination plan and its outcomes, Section 4 presents information about the website, Section 5 is on the promotional materials, including journal articles and presentations, Section 6 tells about the publicity campaign, Section 7 describes the outreach activities to build the BYTE Big Data Community and events organised by BYTE to generate community members. Finally, the summary enumerates the key results of the dissemination of the BYTE project and concludes this deliverable.

3.2 DISSEMINATION PLAN OVERVIEW

This section presents the three key phases of the dissemination plan in chronological order. The BYTE dissemination process has three parts (see figure 2 below):

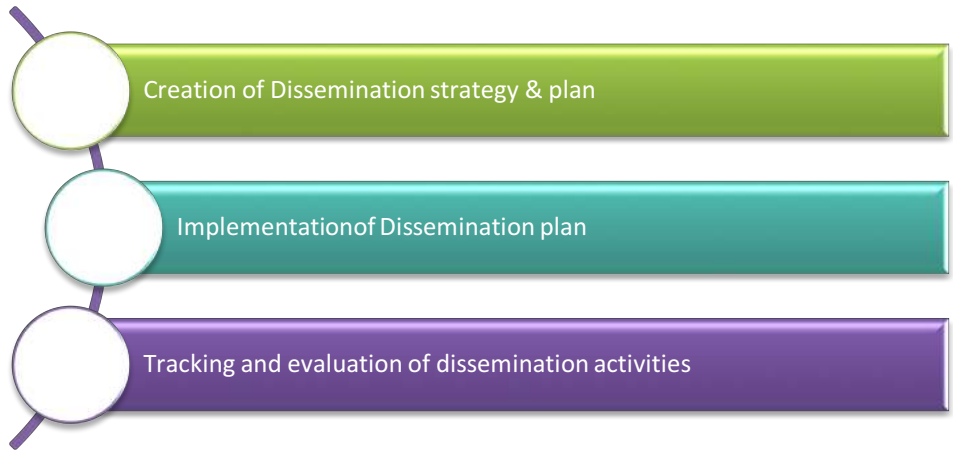

Figure 2: BYTE dissemination plan steps

March 2014 – May 2014 | Creation of a dissemination strategy

The first step included the definition of the overall dissemination strategy, identifying the objectives, target audiences, and channels for dissemination.

The identified **objectives** informed the tactical implementation plan and set the KPI targets, against which the actual implementation would be evaluated (see KPIs in the sections below). The **target audience** were identified as "any group or individual who can affect or is affected by the information ecosystem in a positive or negative manner" and comprised the following broad categories data providers, data users, enablers and secondary stakeholders. These

groups largely involved scientists, industry players, policy-makers, government organisations, standardization bodies, economists, community groups, librarians, journalists, historians, health care professionals, patients and the general public (citizens).

A **mutli-channel approach** was adopted to reach out to these target groups. This included the development of project web site, identified the social media channels, and identified the industry events and academic conferences, as well as the academic journals and industry magazines to be targeted. Table 2 present the stakeholder groups targeted by each dissemination channel.

Table 2. Target stakeholders for dissemination channels

Dissemination channel	Stakeholders targeted
Project website	All stakeholders
Twitter, Facebook	All stakeholders
LinkedIn	Industry, academics, regulators
SlideShare	Industry, academics, policy-makers, regulators
Zenodo, Mendeley	Industry, academics, regulators
Promotional materials and publicity campaign	All stakeholders, but especially the general public
Publications and conferences	All stakeholders
The BYTE big data community (BBDC)	All stakeholders

May 2014 – February 2017 | Implementation of the dissemination strategy and assessment

As mentioned above, each dissemination activity is associated with key performance indicators used at key stages of the project to assess progress (see Table 2). Details for each major dissemination activity is described in their respective sections below. In this section we only present a brief overview of all activities and key lessons learned. The website sessions of the project show a nearly excellent performance, despite technical issues with our website tracking. Social media had a good overall response, though Twitter followership of 336 followers and engagement, especially during event and workshop participation, overshadowing the other channels' performance. This was expected as big data is still not a mainstream concept, hence its key audience still comprises mostly specialist and professional audiences; a point of reflection for the communication strategy going forward. Newsletters reached out to 951 members of the community at a regular intervals consolidating the dissemination of results to interested parties. Participation at 115 conferences and events and sponsorship in 6 major conferences expanded the reach more than 7000 critical participants, mostly industry, policy-makers, civil society organisations and academics. Dissemination of project findings through 37 published papers indicate a good presence amongst the scientific community of Big Data. Of exceptional rate was the downloading of BYTE presentations via the Slideshare service. This indicates the interest of all audiences in acquiring a consolidated version of BYTE findings, and a media strategy around this channel will be employed in the future. A different marketing strategy will also be devised to appeal to the general public in the future, in order to raise awareness and attract their interest, as well as convert such interest into active involvement with the BBDC.

Table 2. Overview of the Key Project Indicators

	Poor	Good	Excellent	Status March 2017
Website sessions	<7,000	7,000-15,000	>15,000	14902
Website page views	<20,000	20,000-50,000	>50,000	37244
Number of downloads (deliverables + slideshare + papers)	<300	300-1,500	>1,500	13722
Number of followers on social media	<100	100-300	>300	336
Number of media articles mentioning BYTE	<15	15-25	>25	18
Number of newsletters circulated	<5	5-10	>10	8
Number of conferences and events where BYTE is presented	<50	50-100	>100	115
Number of published papers	<20	20-35	>35	37

December 2016 – to date | Sustainability

Finally, the third phase focused on the self-sustainability of BYTE dissemination activities. This legacy planning phase began in the last 3 months of the project (December 2016 – February 2017) with a special attention to the establishment and promotion of the big data community (BBDC set up in WP7) and the final project results. This work is still ongoing. The dissemination activities undertaken so far are presented below in Section 7: BYTE Big Data Community Building.

4 WEBSITE

The project website (http//byte-project.eu/) was launched in March 2014 and provided the core online presence of the project throughout the project. It provided the key repository of project material (e.g. key deliverables, presentations) and the main go-to place for disseminating and communicating information about the BYTE project to interested stakeholders (via event and workshop invitations, etc.). It also provided an interactive platform for stakeholder engagement throughout the course of the project via social media links and feeds. Website statistics indicated a development of online audience during the first two years with a good return rate, and a new surge of new users in year 3, which can be attributed to the intensification of the community building activities. The website played an instrumental role in the establishment of the project's initial stakeholder base with 10,637 users in six countries resulting in a total of 14,902 website sessions and 37,244 page viewers. The cumulative number of the three-year project show good performance indicators with

many new users returning to site, particularly in year 2, when research outcomes started being published on the website.

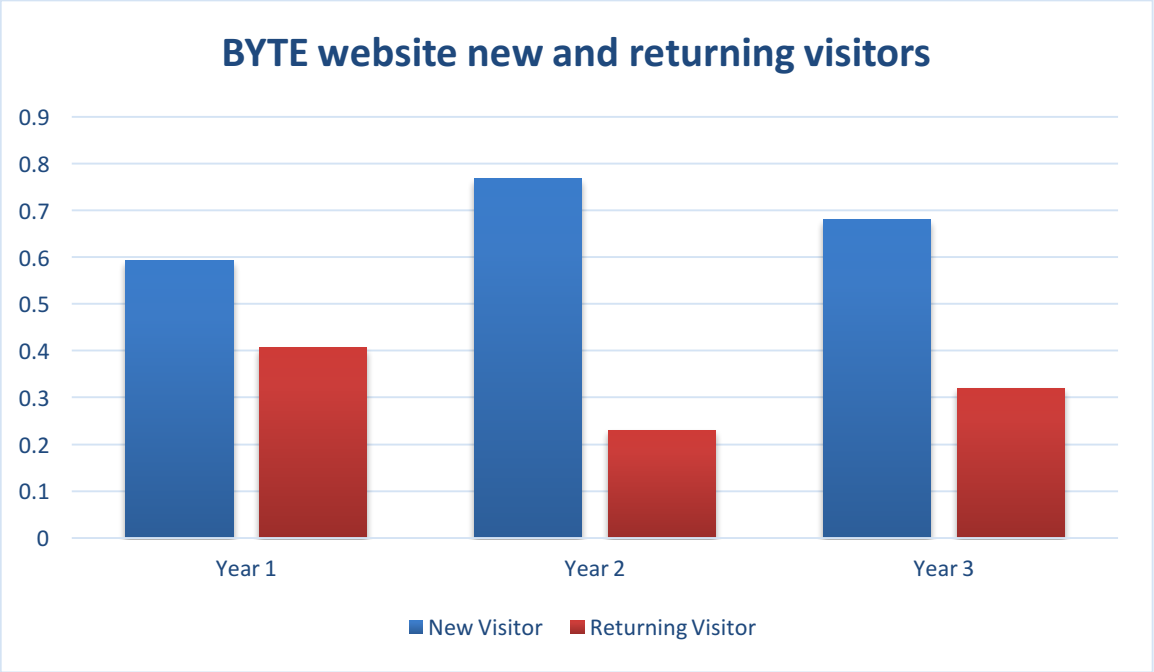

Figure 2 New and returning visitors

Regarding the origin of the traffic came from United Kingdom (22,43%) followed by the others United States (7,44%), Russia (7,03%), Austria (4,41%), Italy (4,41%) and Germany (3,54%) (see figure 6).

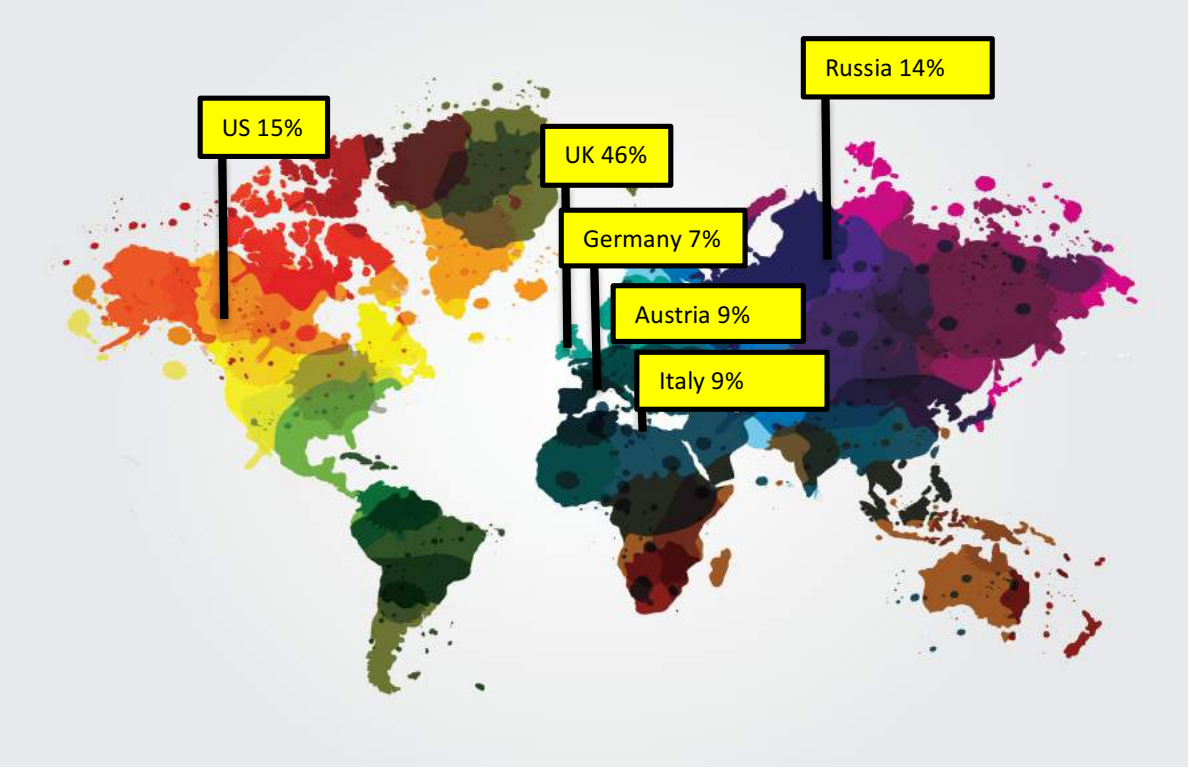

Figure 3: Top country session origins

The website was structured according to seven main sections:

- Home
- BYTE Big Data Community
- Partners
- Case studies
- Research & results
- Events,
- Resources

The website provided transparency and open access to the project effort enabling audiences to track project partners and trace the project's aims, objectives, methodology, progress and outputs. Information on the projects' partners, case studies, research approach and results were presented in the corresponded webpages which were updated as soon as the final versions were agreed by the project team.

The research and results webpage contained all 14 final reports corresponding to the work package deliverables as outlined in the formal project plan commissioned by the EU. The most downloaded documents had been

- D3.2 Case studies report,
- D2.1 Report on big data issues-Final
- BYTE-Big-data-research-roadmapping-workshop.

This indicated the interest of the target stakeholders in the results of the project and was observed in download metrics which risen remarkably from 61 downloads in the first period to 931 in the third period. This is expected to grow further as the project moves towards becoming a community and the project deliverables provide a foundation for the community actions.

Figure 4: Print screen of Slideshare

4.1 BIBLIOGRAPHIC: SLIDESHARE, MENDELEY AND ZENODO

The website provided links to project outputs in the form of journal publications and conference materials targeting primarily academics and policy-makers. Accepted publications (each with a dedicated DOI[1]) were made openly available via the Zenodo platform to be shared with other researchers and EU Projects. ZENODO is an innovative and easy to use web-platform dissemination tool web-platform, which allows for upload, curation and sharing of the research data through an easy to use web interface and integration with other collaboration and data sharing services. Bibliographic information was also disseminated via a dedicated Mendeley group[2].

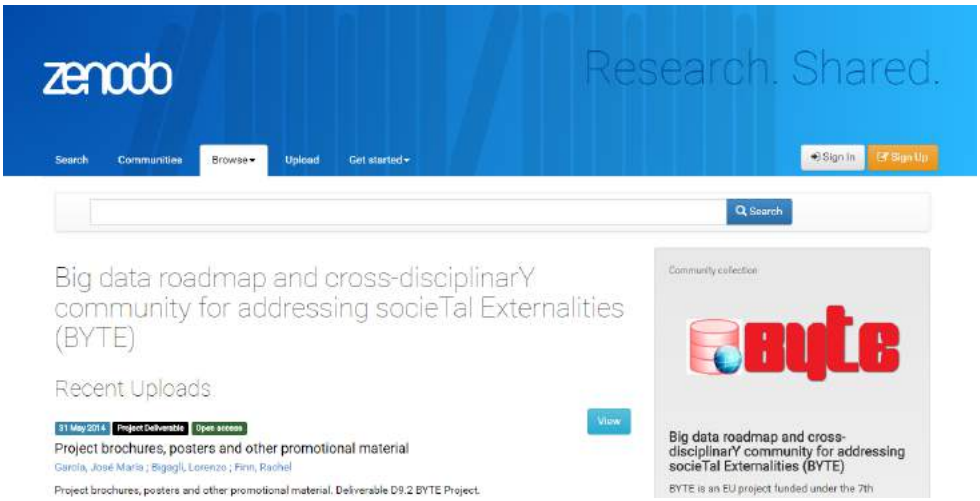

Figure 5: BYTE Zenodo

Associated with these were links to key presentations consolidating the results of the BYTE project. These were made available in the BYTE Slideshare account, which could be accessed by a sidebar on the Home webpage of the project website. Slideshare was perhaps the most influential channel indicating the interest of stakeholders in the outcomes of the project with 25 presentations being viewed 12791 times mostly by stakeholders in the industry, policy-makers, regulators and academics (see table 3 below).

Table 3. List of dissemination activities for indirect stakeholder

Dissemination Channel	Stakeholders targeted	Statistics
SlideShare	Industry, academics, policy-makers, regulators	25 Presentations 12791 Views
Zenodo	Industry, academics, regulators	14 Documents
Mendeley	Industry, academics, regulators	89 Documents
Promotional materials and publicity campaign	All stakeholders	18 Media Articles

[1] https//zenodo.org/communities/byte-eu/

[2] https//www.mendeley.com/groups/7760271/byte-project/

Publications and conferences	Industry, academics, policy-makers, regulators	37 Publications

4.2 WEB BLOG

The BYTE website hosted a web-based blog which provided digestible information about major deliverables, participation to events, other notable happenings. The content of the blog also provided key material for further engagement and publication in social media (Twitter, Facebook) and networking platforms (Linkedin). The weblog contains in total 14 articles. Articles in this blog mostly present, discuss and summarise BYTE workshops, covering topics such as:

- "Big data implications for society"
- "Big data and open access"
- "What do members of the public think about big data information practices?"
- "Horizontal analysis of societal externalities of big data"
- "Evaluating and addressing societal externalities of big data".

4.3 SOCIAL MEDIA

Social media was used to provide opportunities for stakeholders to directly interact with project partners, suggest solutions and maintain engagement of interested parties in the project's efforts. The activities in social media had been continuous and increasing during the three periodic years of the project. Throughout the project BYTE partners tracked relevant hashtags and topics for example in Twitter and Linkedin incorporate their feedback where relevant, and publicise the project's results.

Table 4 Social media metrics

Dissemination channel	Stakeholders targeted	Statistics
Project website	All stakeholders	14,902 Sessions 9,136 Unique Visitors 37,244 Page views 931 Deliverable Downloads 14 Blog Posts
Facebook	All stakeholders	102 Followers 76 Posts
LinkedIn	Industry, academics, regulators	53 Contacts 33 Group Members 10 Posts

The project partners actively and continuously managed three different social media platforms Twitter, LinkedIn and Facebook. Efforts resulted in 336 Twitter followers with 248 tweets, more than 100 Facebook followers and 76 Facebook posts. Particularly successful was the Linkedin networking platform with 53 industry, academic and regulator contacts of which 33 group members engaged with 10 posts.

Figure 6: BYTE Twitter feed

Figure 7: BYTE Facebook page

5 PROMOTIONAL MATERIALS

A **project identity** was designed from the outset with a professionally designed project logo, a threefold brochure (see figure 8).

Figure 8: BYTE brochure

Project posters were created to raise awareness about the project in industry and conference events and BYTE organised workshops (see figure 9).

Figure 9: BYTE posters in situ

In total eight **newsletters and press releases** had been created and circulated to more than 900 participants in the projects email distribution list. The content of the newsletters remained timely and depended on the stage of the project. There was a press release to announce the start of the project in **March 2014**. Updates in the **January, June and December 2015** issue covered general updates of the project, explained work package activity and publicised results and deliverables, as well as outreach activity in terms of event organisation and participation and announced future activities. The **September 2014**, **September 2015 and January 2016** issues announced and invited stakeholder participation in the workshops "Exploring the Positive and Negative Impacts of Big Data Across Sectors" and "Foresight Workshop Big Data Futures for Europe", associated with work packages 4 and 5 respectively. The final **December 2016** issue provided updates on the BYTE vision (WP5), the BYTE big data policy and research roadmap (WP6) and BYTE Big Data Community (WP7), described the events that the partners had organised, announced and invited for participation in the Final conference of the project.

5.1 JOURNAL ARTICLES AND PRESENTATIONS

Partners from the BYTE project have produced 37 journal articles, conference papers and book chapters in the areas of computer science, technology management, law and governance, social science. Many of these focused on major project findings, while others focused on specific case study findings and thus were targeted to relevant journals and conferences where big data is not a standard focus of dicssuion. A selection of the BYTE project publications are listed below.

1. Vega-Gorgojo, Guillermo; Tiropanis, Thanassis; Millard, David "The Opportunity of Linked Data for the European Higher Education Area" *International Journal of Information and Education Technology,* UiO.

2. Stéphane Grumbach, "Intermediation Platforms, an Economic Revolution", *ERCIM* News (Journal), 2014, Inria.
3. Heggestøyl, Simen; Vega-Gorgojo, Guillermo; Giese, Martin, "Visual Query Formulation for Linked Open Data The Norwegian Entity Registry Case", The 27th edition of *Norsk Informatikkonferanse* (NIK) Nov. 2014, UiO.
4. Stavrakantonakis, I., Fensel, A., Fensel, D., "Matching Web Entities with Potential Actions", *International Conference on Semantic Systems* (SEMANTiCS'14), 2014, UIBK.
1. Rachel L. Finn, Hayley Watson, Kush Wadhwa "Exploring big 'crisis' data in action potential positive and negative externalities" *Short Paper – Ethical, Legal and Social Issues Proceedings of the ISCRAM 2015 Conference - Kristiansand, May 24-27 2015.*
5. Guillermo Vega-Gorgojo, Juan I. Asensio-Pérez, Eduardo Gómez-Sánchez, Miguel L. Bote-Lorenzo, Juan A. Muñoz-Cristóbal, Adolfo Ruiz-Calleja, "A Review of Linked Data Proposals in the Learning Domain", *Journal of Universal Computer Science*, 2015, UiO.
6. Dieter Fensel, Nelia Lasierra Beamonte, "Comunicación efectiva en la red para proveedores de servicios turísticos", *Proc. of the XIV Simposio de Comunicación Social*, Santiago de Cuba, Cuba, 2015, UIBK
7. Fensel, A., Kärle, E., Toma, I, "TourPack Packaging and Disseminating Touristic Services with Linked Data and Semantics", *Proceedings of the 1st International Workshop on Semantic Technologies (IWOST)*, 2015, UIBK
8. Nina Solomakhina, Michael Watzke, François Maréchal, Silvio Becher, Steffen Lamparter, Thomas Hubauer, "Modeling and analysis techniques for multimodal utility networks", 2015, SIEMENS.
9. Stefano Nativi, Paolo Mazzetti, Mattia Santoro, Fabrizio Papeschi, Max Craglia, Osamu Ochiai, "Big Data challenges in building the Global Earth Observation System of Systems", 2015, CNR-IIA.
10. Hans Lammerant, Paul De Hert, "Visions of technology. Big data lessons understood by EU policy makers in their review of the legal frameworks on intellectual property rights, access to and re-use of PSI and the protection of personal data", *Data Protection on the Move. Current Developments in ICT and Privacy/Data Protection*, 2016, VUB.
11. Stavrakantonakis, I., Fensel, A., Fensel, D., "Linked Open Vocabulary Recommendation based on Ranking and Linked Open Data", *Semantic Technology. Proceedings of 5th Joint International Semantic Technology Conference (JIST 2015)*, 2016, UIBK
12. Guillermo Vega-Gorgojo, Martin Giese, Simen Heggestøyl, Ahmet Soylu, Arild Waaler, "PepeSearch Semantic Data for the Masses", *PLOS ONE*, 2016, UiO.
13. Faravelon, S. Frénot, S. Grumbach, "Chasing data in the Intermediation Era Economy and Security at stakes", *IEEE Security and Privacy Magazine*, 2016, INRIA
14. Vega-Gorgojo, G., Slaughter, L., "Easy-to-use semantic search of pharmacological data", *Proceedings of the 9th International Semantic Web Applications and Tools for the Life Sciences Conference*, 2016, UiO
15. Stavrakantonakis, I., Fensel, A., Fensel, D., "Linked Open Vocabulary Ranking and Terms Discovery", *In Proceedings of the 12th International Conference on Semantic Systems, SEMANTICS'16*, 2016, UIBK
16. Finn, Rachel L. and Kush Wadhwa, "Mobilising Data Big data in the commercial sector", In Wessels, Bridgette, et al. (Eds.), *Mobilising Data in a Knowledge Society*, Amsterdam University Press, 2017. TRI

17. Martí Cuquet, Anna Fensel, "Big data impact on society a research roadmap for Europe" (preprint arXiv 1610.06766) [under review]
18. Martí Cuquet, Guillermo Vega-Gorgojo, Hans Lammerant, Rachel Finn, Umair ul Hassan, "Societal impacts of big data challenges and opportunities in Europe" [under review]
19. Martí Cuquet, Anna Fensel, Lorenzo Bigagli, "Societal impact of big data on energy efficiency and environment an European roadmap" [under review]

6 PUBLICITY CAMPAIGN

Publicity took the form of participation in and sponsorships of conferences and industry events, email newsletters distributed, mass media interviews, articles and press releases.

6.1 EVENT SPONSORSHIPS

Event sponsorships enabled the project to reach out to 1500 event attendees, through project brochures and posters in key event venues, project identity in the conference programme, but most importantly personal engagement with project participants in person through events organisation, research presentations, panel discussions and the like. In particular, BYTE sponsored the following events:

Table 6. Event Sponsorship

Event	No. of Participants	Type of Audience	Location
CPDP 2015	900	policy makers, scientific community, industry participants, civic organisations	Brussels, Belgium
European Data Forum 2015	900	policy makers, scientific community, industry participants	Luxembourg
European Semantic Web Conference 2015	250	policy makers, scientific community, industry participants	Portoroz, Slovenia
Semantics 2015 conference	300	policy makers, scientific community, industry participants	Vienna, Austria
BDVA Summit 2016	450	policy makers, scientific community, industry participants, civic organisations	Valencia, Spain
Global Forum 2016	300	policy makers, scientific community, industry participants	Eindhoven, The Netherlands

In all cases, the BYTE sponsorship was publicised in the event programmes giving greater visibility to us and creating brand and name recognition (see Figures 10-12). In addition, sponsorship was often linked with stands, panels or workshops within the event, augmenting and amplifying the BYTE message.

Figure 10: BDVA Valencia summit sponsorship

Figure 11: BYTE CPDP sponsorship

Figure 12: BYTE Global Forum sponsorship

6.2 EVENT ATTENDANCE

In addition, BYTE partners attended 115 big data events, presented BYTE outcomes in 86 events appealing to more than 7000 attendees from the scientific community, policy makes, members of civic organisations and industry managers. Partners participated in posters sessions, research presentations, panels, keynote speeches and networking events. An indicative list is presented in Table 7 below, whereas a full list can be found at our website.

Table 7. Event participation metrics

Year	Title of the Activity	Type of Audience	Size of audience	Place
2015	**InfoSpace Hungary Conference**	Scientific Community, Higher Education, Industry, Civil Society, Policy makers, content providers	Total 2000,	Balatonfure, Hungary
2014	**Infotér conference**	Scientific Community, Higher Education, Industry, Civil Society, Policy makers, content providers	Total 1600,	Balatonfure, Hungary
2016	**Net Workshop**	Scientific Community Higher education, Research, Civil Society, Policy makers	800	Debrecen, Hungary
2015	**European Data Forum**	Scientific community, Industry	600	Luxembour, Luxembourg
2014	**European Data Forum**	Policy Makers, Scientific Community: Research	500	Athens, Greece
2015	**Proceedings of the 12th International ISCRAM Conference,**	practitioners; scientific community, civil society, first responders, researchers and academics	500	Kristiansand, Norway
2014	**5th International Conference on Future-Oriented Technology Analysis**	Policy Makers, Scientific Community: Research	300	Brussels
2015	**ISSI 2015 (Conference participation)**	Scientific Community, Research	300	Instanbul
2016	**Surveillance and Society Conference**	Researchers, industry	300	Barcelona, Spain
2014	**11th European Semantic Web Conference - EU projects networking session**	Scientific Community, Industry, Policy makers	250	Crete, Greece
2014	**Semantics Conference**	Scientific Community, Industry, Policy makers, Medias	250	Leipzig, Germany
2015	**ESWC 2015 – EU projects Networking event**	Scientific Community, Industry, Policy makers	250	
2015	**BDVA Summit**	Scientific community, industry, civil society, media and law enforcement agencies	200	Madrid, Spain
2015	**Open Source Intelligence Dissemination Conference**	Scientific community, industry, civil society, media and law enforcement agencies	100	Rome
2015	**XIV Simposio de Comunicación Social, Santiago de Cuba**	Scientific Community, Industry, Civil Society, Policy makers, Medias	100	Santiago de Cuba, Cuba
2015	**SEMANTICS 2015 Conference: European Economy Data Workshop - Focus on Data Value Chain and Big and Open Data**	Policymakers, industry, researchers	100	Vienna, Austria
2015	**ECNU**	Scientific Community (higher education, Research)	100	Shanghai, China

6.3 OTHER PUBLICITY

Finally, the BYTE project was able to gain additional publicity and attention through avenues like third-party blog posts and interviews with media. Details of both are provided below:

Blog posts

- "BYTE into open cultural data" authored by Anna Donovan (TRI) published in March 2015, at OpenGLAM, an initiative run by Open Knowledge that promotes free and open access to digital cultural heritage held by Galleries, Libraries, Archives and Museums (http//openglam.org/2015/03/26/byte-into-open-cultural-data/)
- "Big Data and Agriculture: From bytes to crops and conversely", authored by Roberno Zicary in July, 2015 appeared on http://www.odbms.org, the Resource Portal for Big Data, New Data Management Technologies

Interviews with BYTE partners:

- Anna Fensel (UIBK) was interviewed by Informatik Austria as computer scientist of the week.
- Kush Wadhwa keynote speech on "Addressing risks and opportunities engendered by big data: The BYTE project" at ICT conference in 2014 was made available via videolectures.net.
- Trilateral also featured at the promotional video of the BDVA Valencia Summit 2016

7 BIG DATA COMMUNITY BUILDING

One of the most important goals of the project was to build up BYTE Big Data Community, BBDC, therefore a dedicated webpage was hosted on the project's website. This main aim of the webpage was to invite new member participations, hence it provided the functionality for member to register to the BBDC.

Figure 13: BYTE Homepage

As community building activities intensified in year 3. Community building took various forms from indirect social media engagements to more targeted workshops where project results were communicated and the purpose and future direction of the community were outlined and reiterated. Table 8 below shows the number of participants in our network and the subset of participants in our community building worshops taking place throughout the course of the project, and describe in more detail in section 7.1 below.

Table 7. Network contacts and workshop participation metrics

Participants by category	Poor	Good	Excellent	March 2017
Number of network contacts	<500	500-1,000	>1,000	951 good
Workshop participants: Industry	<50	50-100	>100	84 good
Workshop participants: Policy-makers	<20	20-50	>50	35 good
Workshop participants: Civil society organisations	<10	10-50	>50	11 good
Workshop participants: Academics	<50	50-100	>100	96 good

A Web-enabled video was directed by KIFÜ/NIIF Program for dissemination and awareness activities during and after the completion of the project. This video showcases the project, highlights the innovative case studies and describe its achievements and major research findings, and invites more partners to join the BYTE Big Data Community. It can be downloaded from the following link[3] and accessed via YouTube[4].

[3] http//download.videotorium.hu/recordings/b/bw/bwt/originals/master/15437_14279.mp4?filename=byte_video_showcase.mp4

[4] https://www.youtube.com/watch?v=_8pP4UmJrL0

Figure 10: BYTE video showcase

7.1 BYTE EVENTS: WORKSHOPS AND FINAL CONFERENCE

In addition to external events, BYTE also organised projecte events that were intended to gain stakeholder feedback on research findings, publicise findings and generate interest in the BYTE Big Data Community. For the purposes of gathering feedback, BYTE organised seven focus groups on big data in the following sectors with domain experts participation from:

- health care (9 March 2015, London),
- crisis informatics (10 March 2015, London),
- culture (23 March 2015, Munich),
- smart cities (24 March 2015, Munich),
- environment (13 April 2015, Vienna),
- energy (16 April 2015, Oslo)
- shipping (17 April 2015, Oslo)

Topic driven workshops were also organised around the following topics :

- "Economic, Political, Social and Legal issues in big data" (September 2014, Lyon)
- "Exploring the positive and negative impacts of big data across sectors" (14 October 2015, Dublin)
- "Foresight workshop big data futures for Europe" (10 February 2016, Delft)
- "The Research Roadmap" (1 July 2016, Eindhoven)
- "The Policy Roadmap" (20 September 2016, Eindhoven)
- "Building the BYTE Big Data Community" (1 December 2016, Valencia)

Some of the above workshops were also organised in conjunction with other events to maximise stakeholder participation and attract new participants that had not previously engaged with BYTE.

- Research roadmapping workshop, European Data Forum, Eindhoven, July 2016. More than 30 participants discussed, validated and prioritized research topics to

capture the positive societal impacts of big data and diminish the negative ones. The workshop marked the formal launch of the BYTE Big Data Community.

- Policy roadmapping workshop, Global Forum conference, Eindhoven, September 2016. 24 stakeholders and other participants discussed, validated and prioritised the policy issues that would foster greater take-up of big data technologies in Europe.
- BYTE Big Data Community building workshop, BDVA Summit Valencia, December 2016. In conjunction with the Societal issues Task Force of the BDVA, this workshop included 19-25 participants (participants entered and exited between sessions) who discussed the organisation, mission and sustainability of the BYTE Big Data Community.

The BYTE project also organised specific networking and other workshops at different third party events, sometimes in conjunction with other projects. Some of this information is included in D8.2; however, we re-present it here to provide a full picture.

- "European Data Economy workshop", SEMANTiCS conference, September 2015, Vienna. The aim of the workshop was to engage member of other projects, (Rethink Big, Big Data Europe and ODINE) and industry members (e.g. Teradata) in discussion over Big Data and the Data Value Chain.
- Networking event at the annual ICT conference, October 2015, Lisbon. The aim of the workshop was to encourage hands on involvement in considering Cross-Disciplinary Insights on Big Data Challenges and Solutions.
- BYTE exhibit space, European Data Forum, Luxembourg, November 2015. The aim was to showcase novel data-driven business models, technological innovations and societal aspects of Big Data in Europe and provided an excellent meeting point for industry professionals, researchers, and policymakers.
- BDVA SmallBig Data Summit, The Hague, 2-3 March 2016. The aim was to establish a formal link with the BDVA and demonstrate the utility of BYTE findings and activities for BDVA members.

Figure 14: BYTE Final conference attendees

- "Multidisciplinary aspects of big data in Europe", BDVA Small Big Data Summit, The Hague, organised in conjunction with Big Data Europe. The aim was to engage participants in dialogue with respect to positive and negative aspects of big data across key sectors of the European economy and brainstorm addressing the challenges.
- A joint workshop was organised in collaboration with Big Data Europe and the HOBBIT project. European Data Forum, Eindhoven, July 2016.

The **BYTE Final Conference** took place in London, UK on 9 February 2017 where the major findings of the project were presented, including the roadmap and the community future activities. As part of stakeholder engagement, a wide-ranging set of individuals and organisation were invited to participate in

the conference through direct contact by BYTE project partners. In addition, the consortium used this event to disseminate the roadmap as well as publicising the big data community and its future activities. In total, there were 62 participants in the conference and 23 speakers. Fourteen different European countries were represented among the participants. While almost half of the participants were from the UK, the remaining speakers and participants were well distributed across Europe.

In addition, the conference generated interest from a range of different stakeholder types, including academics, industry representatives (large industry and SMEs), civil society organisations and international governmental organisations and local government representatives and policy-makers. The following figure demonstrates the distribution of these stakeholders across the categories above.

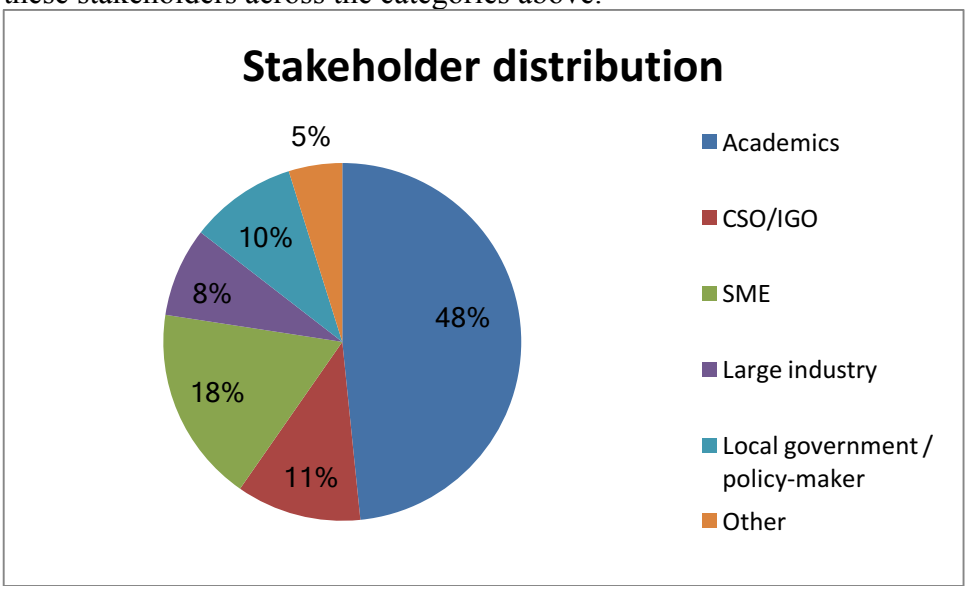

Figure 15: Stakeholder distribution at BYTE final conference

Finally, the conference was organised around thematic panels that were linked with areas of interest for BYTE and focused upon in key deliverables like the Research and Policy Roadmaps. For example, there were panels on:

- Healthcare
- Crisis informatics
- Smart cities
- Geo-spatial data, and
- Big Data Ethics

The project also generated interest across industry and smart cities practitioners and featured keynote presentations from Flanders Make (COO, Marc Engles), Accenture (Principal Scientist, Freddy Lecue) and the Dutch CityRhythm project. From the UK the conference also attracted particpants from Transport for London, Oxford Internet Institute and British Telecom.

As a conclusion of the final conference the emphasis was put on the marketing of the new community, BBDC. The importance of the future community activities was also emphasised.

The main activities of the BBDC are the contribution to policy and research agendas, providing easy access to relevant stakeholders and early access to information and influencing to EC workplans.

8 SUMMARY

The project has achieved a substaintial following in the big data space, and has succeeded in building a community of interested stakeholders that will push forward BYTE activities after the close of the project through the BYTE Big Data Community. Our substantial research and community building exercises has generated a set of almost 1000 interested followers from all of the different stakeholder categories we sought to reach at the start of the project. A particular success has been our engagement with industry representatives, civil society organisations and legal and ethical experts who will form the core membership of the BYTE Big Data Community. In addition, another relatively late addition is the interest of local governments with significant open data sets to the BYTE community of interest. As the Community develops, we will seek to take advantage of this smart cities focus to leverage additional, ethically responsible opportunities to intervene in the European big data space and continue to grow the reach of BYTE as we transition from a project to a community.

Through this transition, project partners will continue to promote stakeholder engagement, to ensure that all the resources mobilised by BYTE, including the Advisory Board members, case study organisations, project partners and founding members, actively contribute to meet the goals of the Community. Furthermore, we will coordinate to stimulate stakeholders' interest in the community via website, press releases, promotion campaign, journal articles and presentations at third-party conferences, to demonstrate the added value of the community, thus incentivising them to participate and increasing its impact. In parallel, we will validate the BBDC impact strategy, assessing our compliance with the values and expectations of BBDC members. Regular impact assessments will allow us to refine the BBDC impact strategy, in particular as regards the specific measures to undertake, should the community members not be diverse enough, active enough or numerous enough to ensure the desired impact, and to oversee the evolution of the community until 2020.