European Commission | Horizon 2020 European Union funding for Research & Innovation

Report on communication in media, at research & industry events, specialized journals

11.28

EU-SysFlex

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773505.

PROGRAMME	H2020 COMPETITIVE LOW CARBON ENERGY 2017-2-SMART-GRIDS
GRANT AGREEMENT NUMBER	773505
PROJECT ACRONYM	EU-SYSFLEX
DOCUMENT	**11.28**
TYPE (DISTRIBUTION LEVEL)	☒ Public ☐ Confidential ☐ Restricted
DUE DELIVERY DATE	M52
DATE OF DELIVERY	M52
STATUS AND VERSION	Final version
NUMBER OF PAGES	28
Work Package / TASK RELATED	WP11/T11.1
Work Package / TASK RESPONSIBLE	WP11/T11.1
AUTHOR (S)	EURACTIV Slovakia

DOCUMENT HISTORY

VERS	ISSUE DATE	CONTENT AND CHANGES
1	23/02/2022	First version
2	1/03/2022	Final version

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EirGrid	John Lowry (Project Coordinator)

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

CA	Consortium Agreement
DoA	Description of Action
DB	Demonstration Board
EC-GA	Grant Agreement
EU-SYSFLEX	Pan-European System with an efficient coordinated use of flexibilities for the integration of a large share of Renewable Energy Sources (RES)
PMB	Project Management Board
WP	Work Package
WESC	Wind Energy Science Conference

1. EXECUTIVE SUMMARY

The following report addresses the requirement for deliverable 11.28 “Report on communication in media, at research & industry events, specialized journals” associated with task 11.6 “Research & Industry events, journals”. The task 11.6 was focused on the communication of project activities/outputs at research / industry events (conferences, seminars, etc.) and in specialized journals. Aim of the task was to raise awareness of the project among relevant stakeholders (mostly research community, industry & other interest groups) to help future exploitation of the outcomes.
Numbers of reach, views and other metrics in this report are valid as of 28.2.2022.

2. DISSEMINATION AND COMMUNICATION PLAN

2.1 KPIS METRICS

The following KPIs relate to planned communication and dissemination activities

NO	INDICATOR	METHOD OF MEASUREMENT	EXPECTED OUTCOME	NUMBER OF REACHED UNTIL NOW / EXPLANATION
1	Directly engaged stakeholders	Number of participants at stakeholder events	300	1 538 stakeholders (195 at offline events, 1388 at online events)
2	Engaged Stakeholders	Number of registered users receiving EU-SysFlex newsletter	5 000	732 people registered (due to the change in GDPR policies, we were not able to gather the email addresses as planned in the first stage of the project. We were only able to promote the newsletter on the website and social media and to send out the sign-up link to people registered to our events. We also asked partners to spread information about our newsletter, informed about it via BRIDGE initiative. However, we were not able to develop our own target list without personal permissions.)
3	Dissemination	Number of cluster activities undertaken	30	144 (1 offline event hosted by EU-SysFlex with speakers from other H2020 projects, 3 online events with the OSMOSE project, approximately 98 articles about EU-SysFlex published, 42 participations at industrial events and workshops.)
4	People informed about the project	Number of people receiving information on the project online	500 000	736 992 people informed about the project (629 346 reached on social media; 107 646 direct visitors on website)
5	Use of project communication channels	Number of users / visitors of website and social media per month	2 000	14 172 average number of visitors on website and on social media per month

TABLE 1: COMMUNICATION KPIS

These KPIs relate to the whole project period of 48 months and are cumulative.

2.2 TARGET GROUPS

List of identified target groups & concrete examples:

POLICY ACTORS AND DECISION-MAKERS AT THE EUROPEAN LEVEL	DECISION-MAKERS AT THE NATIONAL LEVEL	INDUSTRY	RESEARCH AND ACADEMIA	OTHER ORGANISED INTERESTS & MULTIPLIERS
Relevant DGs – Energy, Enviro, Internal Market, Research & Innovation Relevant MEPs National representations to the EU: selected countries (non-exhaustive list: France, Germany, Spain, Italy, Ireland, Poland, Portugal) ECOSOC Relevant committees and WGs (Non-exhaustive list: Electricity cross-border Committee, C ommittee on Renewable Energy Sources, Climate Change Committee, Commission expert group on climate change policy, Commission expert group on electricity interconnection targets, Electricity Coordination Group)	Ministries and regulatory bodies Relevant MPs	Industry associations and representatives at the European level (ENTSO-E, EDSO, Eurelectric, etc.) Major industrial players (energy producers, DSOs, TSOs, technology providers)	Relevant research institutions Research teams	Other interest groups at the European level: in the areas of Energy efficiency, Enviro, Energy security Brussels-based media & journalists National media in selected countries

TABLE 2: TARGET GROUPS

The structured database of contacts was compiled and updated by the WP11 leader and stored on the internal communication platform.

Target groups, channels, and objectives

TARGET GROUP	MAIN COMMUNICATION CHANNELS	TYPE OF INFORMATION	OBJECTIVE
European Policy actors and decision makers (sector-specific) Relevant DGs – Energy, Enviro, Internal Market, Research & Innovation, Connect Relevant MEPs National representations to the EU: selected countries Regulators (CEER and ACER) Relevant committees and WGs (Non-exhaustive list: Electricity cross-border Committee, Committee on Renewable Energy Sources, Climate Change Committee, Commission expert group on climate change policy, Commission expert group on electricity interconnection targets, Electricity Coordination Group)	Web and social media Policy Workshops in Brussels Specialised communication channels	Importance of flexibility services, challenges, and outlook. End users' participation in demo and main results.	Project involvement Policy dissemination
National Decision-makers (sector-specific, selected countries) Ministries, regulatory bodies and Relevant MPs	Web and social media Policy Workshops in European capitals (Spain, France, Germany, Italy, Poland, Slovakia)	Importance of flexibility services, challenges and outlook. End users participation in demo and main results.	General awareness Policy dissemination
Industry TSOs DSOs Retailers ESCOs Manufacturers of equipment components Industry associations and representatives at the European level	Web and social media Press releases Scientific journals, conferences (CIRED, Powertech, PSCC, Cigre, AEIT, etc.) Industry events Dedicated Workshops Specialised communication channels	End users participation in demo and main results Experience reports from 6 demonstrators	Project involvement and Commercial exploitation
Research and academia (Relevant research institutions &teams)	Web and social media Scientific journals, conferences (CIRED, Powertech, PSCC, Cigre, AEIT, etc.)	Experience reports from 6 demonstrators	R&D cooperation

Other target groups Interest groups at the European level: Energy efficiency, Enviro, Energy security Brussels-based media & journalists National media in selected countries (countries represented in the project consortium) Environmental NGOs Citizen organizations Individual citizens	Web and social media Press releases	Basic facts about transmission networks and flexibility Importance of flexibility, challenges, and outlook	General awareness

TABLE 3: COMMUNICATION CHANNELS AND OBJECTIVES

Target groups and their relevance for project objectives

TITLE	PROJECT INVOLVEMENT	R&D COOPERATION	GENERAL AWARENESS	POLICY DISSEMINATION	COMMERCIAL EXPLOITATION
Decision-makers: EU	HIGH	LOW	MEDIUM	HIGH	LOW
Decision-makers: national	MEDIUM	LOW	MEDIUM	HIGH	LOW
Industry	HIGH	MEDIUM	HIGH	LOW	HIGH
Research & academia	MEDIUM	HIGH	LOW	LOW	LOW
Other interest groups and media	MEDIUM	LOW	HIGH	HIGH	LOW

TABLE 4: RELEVANCE OF TARGET GROUPS FOR PROJECT OBJECTIVES

3. DISSEMINATION AND COMMUNICATION INFRASTRUCTURE AND CHANNELS

The communication infrastructure included:

- A project logo and visual identity elements
- Project website
- Project social media channels / profiles on Facebook, Twitter, YouTube, LinkedIn
- Project flyers (updated upon an agreement within partners)
- Project brochure (updated upon an agreement within partners)
- Project promo videos (3 videos targeted to different users: decision-makers, industry, and public)
- Communication at research & industry events, in research and industry journals
- Communication in media
- Project blog
- Project final report (Roadmap summary)

3.1 PROJECT WEBSITE AND PARTNERS´ WEBSITES

The project used the website http://eu-sysflex.com/ as the main official online communication channel. The project website includes:

- Information on the project purpose, structure of WPs, demonstrations projects and planned activities
- Information on consortium partners
- Information on planned and past project events
- Information on other communication activities (articles in media, participation at events, etc)
- Public deliverables, project newsletter, project flyer, brochure, video, infographics
- Documents related to project outcomes and outputs
- Contact details of project team

The project website was regularly updated by the WP11 leader, based on the information provided by the project partners:

- Information on the planned and past project events,
- Information in the Media section (pieces published about the project, its activities and project partners),
- Information on the participation at events.

Pageviews during the whole duration of the project: 107 646.

3.2 SOCIAL MEDIA

The main social media channels used by the EU-SysFlex project included:

- Twitter account: https://twitter.com/eusysflex
- Followers: 524 (28.2.2022)
- Tweets: 547 (28.2.2022)
- Reach:
  - 2017: 21 839
  - 2018: 133 724
  - 2019: 177 152
  - 2020: 63 974

- 2021: 31 559
- 2022: 20 309

FIGURE 1 TWITTER ACCOUNT - HEADER

- Facebook page: https://www.facebook.com/EUSysFlex/
- Followers: 171 (28.2.2022)
- Reach:
  - 2017: 7 754
  - 2018: 14 932
  - 2019: 14 882
  - 2020: 4 697
  - 2021: 5 699
  - 2022: 1 521

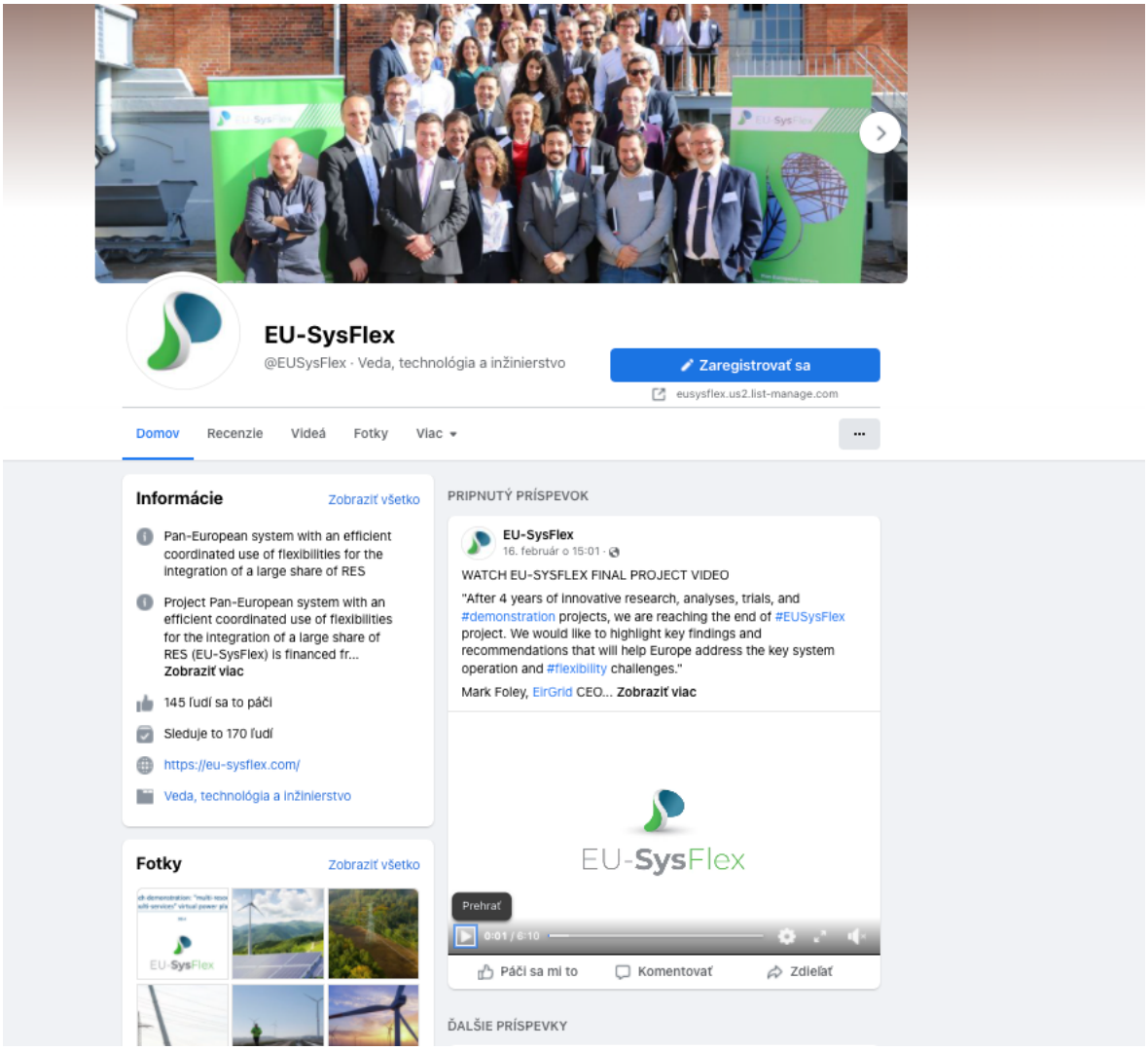

FIGURE 2 FACEBOOK PAGE - HEADER

- LinkedIn profile: https://www.linkedin.com/company/eu-sysflex
- Followers: 970 (28.2.2022)
- Reach:
    - 2018: 14 798
    - 2019: 46 470
    - 2020: 31 061
    - 2021: 22 642
    - 2022: 18 860

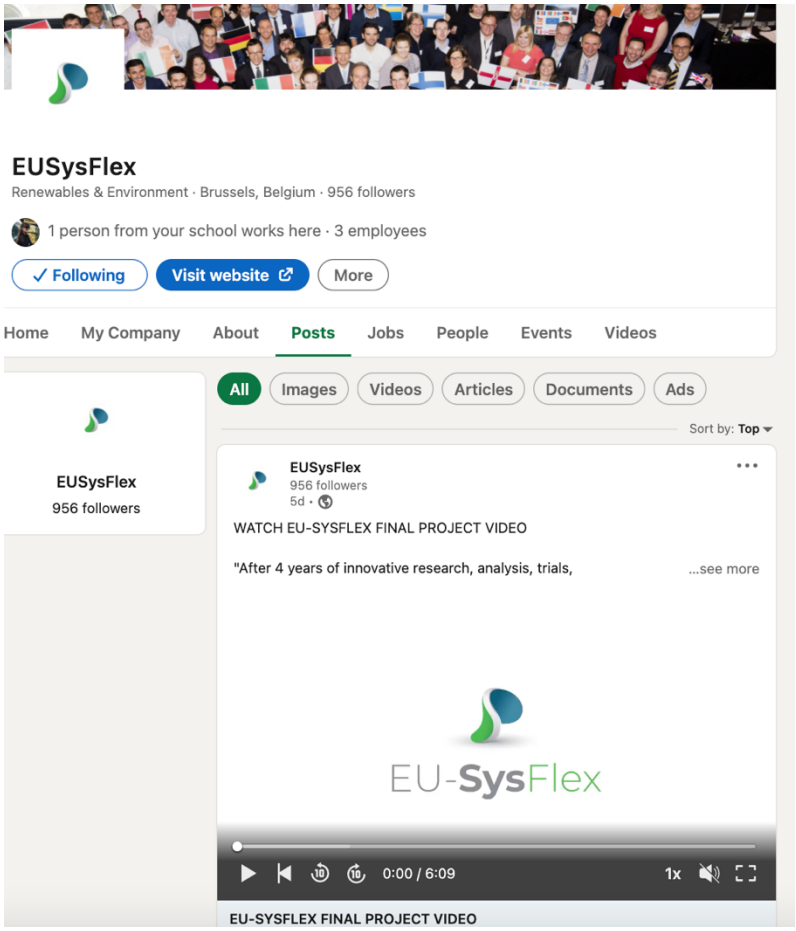

FIGURE 5 LINKEDIN PAGE - HEADER

- YouTube profile: https://www.youtube.com/channel/UCSnQOPt36UWd601ENP2-7ew?view_as=subscriber
- Subscribers: 31 (28.2.2022)

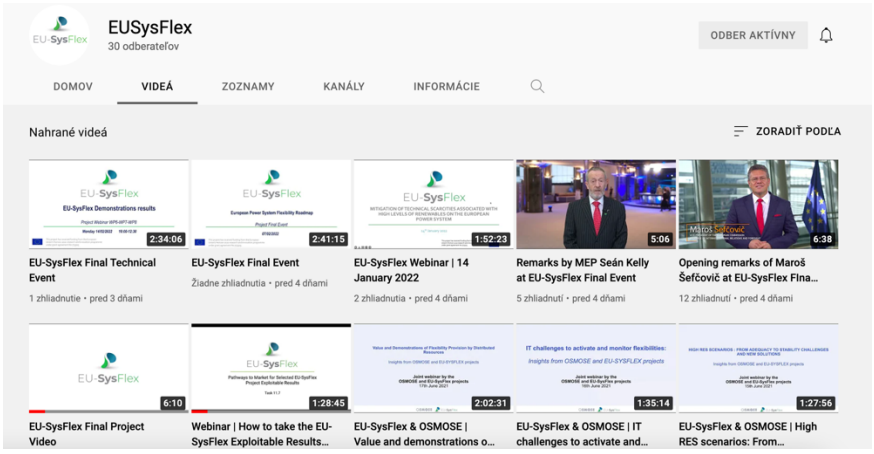

FIGURE 6 YOUTUBE PROFILE- HEADER

Social media channels will support and complement the communication on the project website, and will target specific groups, in accordance with the overall structure of the social media users:

- LinkedIn, Twitter, Facebook:
    - Communication of technical information and information related to business model or technological innovations
    - Utilized to engage stakeholders
    - Communication focused on policy-related information
    - Engaging stakeholders from public institutions, or corporate & civil society stakeholders relevant for policies, policy recommendations
    - General information on the project and project activities
    - Aimed at broader public, awareness raising
- YouTube:
    - Publication of project videos and project videos and videos from events.

To increase the reach of social media communication, WP11 leader supported project partners´ dissemination through their existing social media channels:

- Regular reminders via email or internal newsletter: WP11 leader was sending reminders to project partners to re-post / re-tweet from the project social media accounts and disseminate information among their own contacts.
- Active networking: depending on specific organizations' rules, project partners were encouraged to share the project social media channels with their contacts by social media, email newsletters, etc. and encourage users to subscribe, follow, etc. Depending on the specific policies and rules in the project partners´ organizations, WP11 leader coordinated interlinking / networking of the project social media accounts, with the social media accounts of the project partners.
- Regular information flow: on ad hoc basis, WP11 leader alerted project partners on more important post on social media channels and encourage them to share and disseminate them.

Besides project-specific social media channels, project partners used the existing social media communication channels to communicate the project activities, and relevant outcomes / outputs.

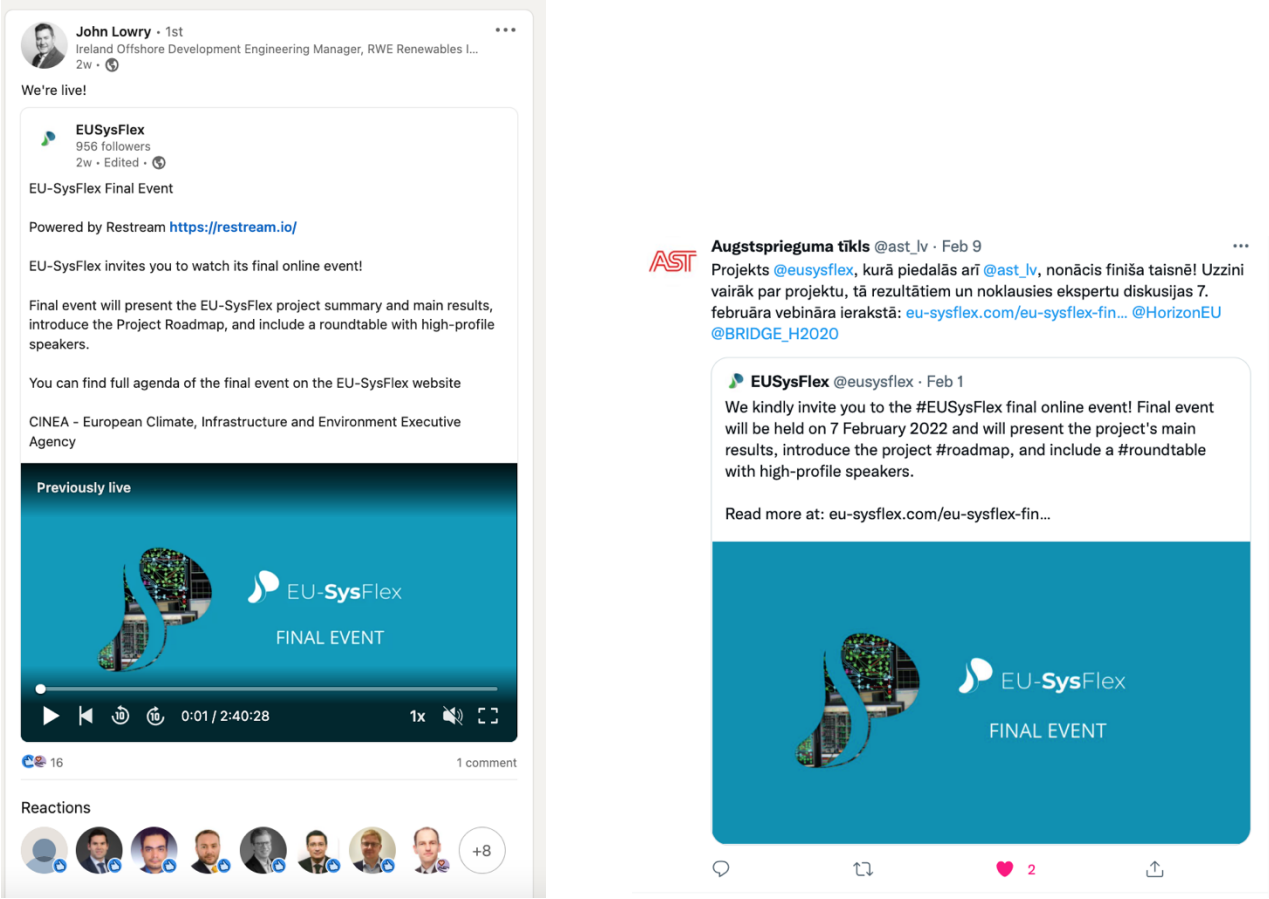

FIGURE 7 EXAMPLES OF THE POSTS BY PROJECT PARTNERS

3.3 NEWSLETTERS

EU-SysFlex newsletters were distributed every six months, covering the most important EU-SysFlex events, outcomes, and other relevant information. All content in the newsletter was published in English. The last newsletter was published after four months of the project since with the closeout of the project, a lot of relevant outputs were being published.

Project partners contributed to the contact list (in form of database, or individual contacts), depending on the relevant policies and rules in their organisations, and in accordance with the existing legal regulations. Person interested in receiving the newsletter could register for its subscription via EU-SysFlex website as well.

Each newsletter was uploaded on the project website and shared on the project social media as well. The structure and design of the newsletter was approved by the PMB. Before sending, each newsletter was approved by the Project Coordinator.

Project partners were encouraged to re-send the newsletter to their own contacts, or disseminate it otherwise, depending on the relevant policies and rules in their organisations, and in accordance with the existing legal regulations.

Number of newsletter subscribers: 723

3.4 PRESENTATIONS AT RESEARCH AND INDUSTRY EVENTS

Project partners helped to communicate project activities/outputs at research / industry events (conferences, seminars, fairs, etc) and in specialized journals. The activity was coordinated by the WP11 leader.

WP11 leader maintained the database of relevant leaders (each partner contributed to the database) on an internal communication platform. The same platform also contained general presentation of the project, template for the ppt presentation, and template for the report filled by partners representing the project at events.

WP11 leader actively involved partners about upcoming events (at the PMB meetings, by group email, or individually) and coordinated the presentation of the project by individual partners.

The aim of the presentations at the research and industry events was to raise awareness of the project among relevant stakeholders (mostly research community, industry & other interest groups), to help future exploitation of the outcomes.

Each project partner may present the EU-SysFlex project at the listed events, or any other event research and industry related to the topic of the project. Expenses related to the participation are covered by individual partners; WP11 leader will provide presentation materials and administrative support.

Moreover, partners were working on dissemination of the project via applications for various industrial awards. For example, in 2021 EU-SysFlex German Demonstration was recognized and awarded a runner-up place at the 7th ISGAN Award of Excellence and nomination of project director John Lowry for the The Global Power & Energy Elites 2022 was successful.

EU-SysFlex shortlisted for 'Good Practice of the Year 2020' award, Global Power & Energy Elites 2021 awards German demonstrator.

List of presentations of the project at research and industry events:

1. EDP Labora Event
2. John Lowry from EirGrid at Bridge initiative event
3. ENTSO-E meeting in Brussels
4. EGVI Workshop - EVs and their integration into the grid
5. BITS seminar. Data sharing and re-use. Sectoral perspectives and common takeaways
6. ETIP SNET Northern Region Workshop
7. EC workshop. Advanced & Interoperable Digital B2B Platforms for Smart Factories and Energy
8. ENTSO-E internal workshop on Data Access
9. SETPlan17, Central European Energy Conference 2017
10. InnoGrid 2018
11. Networking village at EUSEW 2018
12. Eole Industrie 2018
13. Horizon 2020 Energy info day
14. Brainstorming workshop of TSOs in Tallinn, Estonia
15. InnoGrid 2019
16. EUSEW 2019
17. EDF-EPRI Electrification summit in Paris

18. Visit by King Carl XVI Gustaf and Queen Silvia to EirGrid
19. SEST'19 EU-SysFlex Workshop in Porto, Portugal
20. EU-SysFlex hosted workshop at Energy Data Access Conference in Tallinn, Estonia
21. Wind Integration Workshop 2019
22. EPRI-EDF Electrification Summit 2019
23. Renewables Grid Initiative workshop in November in Brussels
24. EU-SysFlex demonstration nominated for Global Power & Energy Elites of 2020
25. PAC Project – 3rd Modellers' Exchange Workshop (After event article)
26. InnoGrid 2020 virtual sessions
27. EUSEW 2020
28. RGI digital workshop
29. INEA Virtual Workshop
30. IEEE Power & Energy Society event
31. Virtual workshop on private energy data standardization
32. INTERRFACE Flexibility Solutions webinar
33. 24/7 Carbon-Free Energy by 2030 Workshop
34. IEA online meeting
35. BRIDGE General Assembly
36. EU Industry Week 2021 – BRIDGE Initiative webinar
37. OPEN DEI initiative workshop
38. EU-SysFlex awarded at the 7th ISGAN Award of Excellence
39. 12th ETIP SNET Regional Workshop
40. 13th ETIP SNET Regional Workshop
41. Webinar on Portuguese Virtual Power Plant
42. E.ON and MITNETZ STROM online event

FIGURE 8 PROJECT PARTNERS AT THE INDUSTRY EVENT

3.5 SCIENTIFIC PUBLICATIONS

Project partners, especially the technology partners, promoted the EU-SysFlex project, and the main outcomes, in the scientific and research publications (journals, online platforms, etc.).

The publication in the scientific journals was guided by the relevant rules of the Horizon 2020 programme (such as on open access publication), the Grant Agreement, and the Consortium Agreement.

List of scientific publications:

No.	Type	Title	Authors	Title of the Journal/Proc./Book
1	Thesis/Dissertation	Economic Potential of Explicit Demand Response in Private Electric Vehicle Charging Networks	Einolander, Johannes	
2	Thesis/Dissertation	Commercial Control of Reactive Power in an Electricity Distribution Company	Takala, Suvi	
3	Publication in Conference proceedings/Workshop	Equivalent dynamic model of active distribution networks for large voltage disturbances	Nuno Fulgencio, Carlos Moreira, Leonel Carvalho, Joao Pecas Lopes	2019 IEEE Milan PowerTech
4	Publication in Conference proceedings/Workshop	"Operating the Ireland and Northern Ireland Power System with 70% Renewables by 2030: Technical Scarcity Identification"	S. Nolan, D. McSwiggan, P. Wall, H. Qazi, D. Corcoran, J. Kelliher and J. O'Sullivan	Wind Integration Workshop
5	Publication in Conference proceedings/Workshop	Energy and Reserve Markets: In(ter)dependent in a High-RES World	K. van den Bergh, E. Delarue	16th IAEE European Conference
6	Publication in Conference proceedings/Workshop	"Probabilistic estimation of the aFRR requirement in the future European power system with high RES penetration"	J. Morin, G. Prime, Y. Wang	2019 Wind Integration Workshop
7	Article in Journal	Energy and reserve markets: interdependency in electricity systems with a high share of renewables	Kenneth Van den Bergh, Erik Delarue	Electric Power Systems Research
9	Publication in Conference proceedings/Workshop	Impact of Flexibility Service Requirements on Investment Decisions and Costs	C. O'Dwyer, D. Flynn	19th Wind Integration Workshop
10	Thesis/Dissertation	"Application and Evaluation of LSTM Architectures for Energy Time-Series Forecasting" Master's thesis, University of Tartu.	Abdullayeva, Gunay.	
13	Article in Journal	Incorporating Non-Convex Operating Characteristics Into Bi-Level Optimization Electricity Market Models	Yujian Ye, Dimitrios Papadaskalopoulos, Jalal Kazempour, Goran Strbac	IEEE Transactions on Power Systems
14	Article in Journal	Backbone—An Adaptable Energy Systems Modelling Framework	Niina Helistö, Juha Kiviluoma, Jussi Ikäheimo, Topi Rasku, Erkka Rinne, Ciara O'Dwyer, Ran Li, Damian Flynn	Energies
15	Publication in Conference proceedings/Workshop	Control of Reactive Power in Electricity Distribution Companies.	Takala, S.; Pihkala, A.; Heine, P.	CIRED 25th International Conference on Electricity Distribution, no 1448.
16	Thesis/Dissertation	The Effects of Load Management Methods in Office Buildings on the Planning of Distribution Networks.	Koivuniemi, E. Toimistokiinteistöjen tehonhallintaratkaisujen vaikutukset sähkönjakeluverkon mitoittamiseen.	
17	Thesis/Dissertation	Electricity Distribution Network as a Platform for Demand Response.	Korpio, J. Sähkönjakeluverkko kysyntäjouston mahdollistajana (in Finnish).	
18	Publication in Conference proceedings/Workshop	Stochastic Bidding Strategy for Electrical Vehicle Charging Stations. Accepted, publication pending.	Divshali P.; Evens C.	Frequency Containment Reserves Markets in IET Generation, Transmission & Distribution
19	Publication in Conference proceedings/Workshop	Optimum Day-ahead Bidding Profiles of Electrical Vehicle Charging Stations in FCR Markets	Divshali P.; Evens C.	PSSC 2020
20	Publication in Conference proceedings/Workshop	"Operational optimization framework improving DSO/TSO coordination demonstrated in real network operation," , Berlin, 2020. (Abstract accepted, full paper sent).	Stock S., Löwer L., Wende-von Berg S., Braun M., Wang Z., Albers W., Calpe C., Staudt M., Silva B., Retorta F., Silva J., Carvalho L.	26th CIRED INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTRICITY DISTRIBUTION
21	Publication in Conference proceedings/Workshop	"Processes and Systems for Using Flexibility from Distribution Grid to Integrate a High Share of RES in a Resilient Stable and Efficient Operated Energy Supply System,"	Staudt M., Pfeiffer M., Wang Z., Wende-von Berg S., Silva B., Retorta F., Silva J., Carvalho L.,	18th Wind Integration Workshop

			Löwer L., Stock S., Albers W., Calpe C.	
22	Publication in Conference proceedings/Workshop	"Flexibility Hub – Multi service framework for coordination of decentralised flexibilities"	J. Villar, J. Aguiar, F. Retorta, B. Silva, N. Fulgêncio, N. Filipe, M. Marques and M. Louro;	CIRED 25th International Conference on Electricity Distribution, 666, CIRED 2019 (June 2019);
23	Article in Journal	Optimum Operation of Battery Storage System in Frequency Containment Reserves Markets	Poria Hasanpor Divshali, Corentin Evens	IEEE Transactions on Smart Grid
24	Publication in Conference proceedings/Workshop	Aggregated Forecasting of the Load Control Responses Using a Hybrid Model that Combines a Physically Based Model with Machine Learning, no 105. CIRED2020 Workshop in Berlin (9/2020). Paper accepted, to be published after the conference workshop.	Koponen P., Salmi, T., Evens, C., Takala, S., Hyttinen, A., Brester, C., Kolehmainen, M., Niska, H.	CIRED2020 Workshop in Berlin
25	Article in Journal	Aggregated dynamic model of active distribution networks for large voltage disturbances	Nuno Fulgêncio, Carlos Moreira, Leonel Carvalho, João Peças Lopes	Electric Power Systems Research
26	Article in Journal	Quantification of the Energy Storage Contribution to Security of Supply through the F-Factor Methodology	Spyros Giannelos, Predrag Djapic, Danny Pudjianto, Goran Strbac	Energies
27	Publication in Conference proceedings/Workshop	"Enabling the participation of wind energy in energy markets - a Virtual Power Plant approach",	M. Marques, N. Filipe, B. Martins, M. Patena, M. Seydenschwanz and P. Fige;	Wind Energy Science Conference 2019, Cork, Ireland (June 2019)
28	Publication in Conference proceedings/Workshop	Smart Charging in Office Buildings, no 232	Koivuniemi, E., Lepistö, J., Heine, P., Takala, S., Repo, S.	CIRED2020 Workshop in Berlin (9/2020).
29	Article in Journal	Deep Reinforcement Learning for Strategic Bidding in Electricity Markets	Yujian Ye, Dawei Qiu, Mingyang Sun, Dimitrios Papadaskalopoulos, Goran Strbac	IEEE Transactions on Smart Grid
30	Publication in Conference proceedings/Workshop	A Deep Q Network Approach for Optimizing Offering Strategies in Electricity Markets	Yujian Ye, Dawei Qiu, Dimitrios Papadaskalopoulos, Goran Strbac	2019 International Conference on Smart Energy Systems and Technologies (SEST)
31	Publication in Conference proceedings/Workshop	Assessment of the dynamic frequency stability of the future Continental Europe power system – Interconnected incidents and system splits	J. Fournel, G. Prime, Y. Wang	2020 CIGRE conference proceedings
32	Publication in Conference proceedings/Workshop	Provision of FCR reserve by wind power plants: capability and performance assessment based on experimental results	V. Gomes,Y. Wang, A. Breton, M. Mourier, L. Holicki, M. Letzel	19th Wind and Solar Integration Workshop
33	Publication in Conference proceedings/Workshop	The EU-SysFlex French industrial-scale demonstrator: coordinating distributed resources for multi-services provision	Y. Wang, H. Morais, B. Lenz, V. Gomes, T. Godlewski, H. Baraffe	CIRED 2019 Conference
34	Publication in Conference proceedings/Workshop	An advanced offline simulation platform to test in realistic conditions the Energy Management System software for operating a Virtual Power Plant	H. Baraffe, A. Breton, C. Stefanelli, Y. Wang	CIRED 2021 conference
35	Publication in Conference proceedings/Workshop	Impact of variable RES in the European power system for 2050 – a technical and economic analysis as part of EU-SysFlex Project	B. Caroline, C. Camille, D. Anne, S. Marcelo	IAEE 2021
36	Article in Journal	Fast parallel Newton–Raphson power flow solver for large number of system calculations with CPU and GPU	Zhenqi Wang, Sebastian Wende-von Berg, Martin Braun	Sustainable Energy, Grids and Networks
37	Article in Journal	On the temporal granularity of joint energy-reserve markets in a high-RES system	Mathias Hermans, Kenneth Bruninx, Kenneth Van den Bergh, Kris Poncelet, Erik Delarue	Applied Energy
38	Publication in Conference proceedings/Workshop	Inertia need and cost related to system splits for the future Continental Europe power system	G.PRIME, N.BOUSSONNIERE, M.DESMARTIN, Y.WANG, J.MORIN	2022 CIGRE
39	Publication in Conference proceedings/Workshop	Probabilistic estimation of the aFRR requirement in the future European power system with high RES penetration	Juliette MORIN, Grégoire PRIME, Ye WANG	2019 Wind Integration Workshop
40	Publication in Conference proceedings/Workshop	Set-up of a new coordinated process for ancillary services provision from DSO to the TSO: an innovative approach to the exploitation of flexibilities connected to the distribution grid	Carla Marino, Simone Tegas, Luigi D'Orazio, Gianluca Di Felice, Daniele Clerici,	

			Giacomo Viganò, Chiara Michelangeli	
41	Article in Journal	Active Power Curtailment in Power System Planning	Roman Bolgaryn; Zhenqi Wang; Alexander Scheidler; Martin Braun; UniKassel Fraunhofer IEE	IEEE Open Access Journal of Power and Energy
42	Article in Journal	Approximating multi-purpose AC Optimal Power Flow with reinforcement trained Artificial Neural Network	Zhenqi Wang; Jan-Hendrik Menke; Florian Schäfer; Martin Braun; Alexander Scheidler; UniKassel Fraunhofer IEE	Energy and AI
43	Publication in Conference proceedings/Workshop	Fast parallel quasi-static time series simulator for active distribution grid operation with pandapower	Zhenqi Wang; Zheng Liu; Markus Kraiczy; Nils Bornhorst; Sebastian Wende-von Berg; Martin Braun; UniKassel, Fraunhofer IEE	CIRED 2021 - The 26th International Conference and Exhibition on Electricity Distribution

TABLE 1: LIST OF SCIENTIFIC PUBLICATIONS

3.6 MEDIA COMMUNICATION

EU-SysFlex project, outcomes and main activities were communicated in media, using three main channels:

- Communication via EURACTIV Network portals: news, interviews, documents, video, infographics
- Communication in general media: articles, interviews, videos in general media
- Press releases: Information on specific stages in the project, outcomes

The main aim was the communication of project outcomes and activities, targeted at stakeholders (industry, policymakers), and raising the general awareness of the project among public.

3.6.1 COMMUNICATION ON EURACTIV NETWORK PORTALS

Communication involved:
- Publication of press releases and other materials produced by the project consortium
- Publication of articles related to the EU-SysFlex project (reports on activities, outcomes, etc.)
- Interviews with representatives of the project consortium, or other relevant experts, on the activities or
outcomes of the EU-SysFlex projects, or related issues
- Publication of infographics, videos and similar content formats related to the activities or outcomes of the
EU-SysFlex projects.

The main aim was the communication of project **outcomes** and **activities**, targeted at stakeholders (industry, policymakers), and raising the general awareness of the project among public. Effective communication, especially to the industry stakeholders, and policymakers, will support the future exploitation of the project outcomes.

Communication partners:

- EURACTIV Brussels
- EURACTIV France
- EURACTIV Spain
- EURACTIV Germany

- EURACTIV Poland
- EURACTIV Slovakia

Number of communication outcomes:

- **EURACTIV.com,.fr,.de:** European special report: 1 introductory, overarching piece produced by the Brussels office
    - 5 country-specific items produced by 5 of our network partners' editorial teams
    - 2 articles published on each of the 5 participating EURACTIV national news sites, in their language: the introductory piece and the respective country-specific one
- **EURACTIV.sk,.es (EFE), .pl:** 10 editorial pieces about the topics of the project
- Piece/s published as advertorials (marked as promoted/commercial content) – prepared by the project

* Editorial Independence: The editorial coverage on EURACTIV portals was executed in line with the editorial mission and principles of EURACTIV portals.

All the outcomes were communicated also on the social media, such as Facebook, Twitter, LinkedIn and Instagram of the network portal.
All information published on EURACTIV portals is linked to the main communication channel of the project –the project website, as well as relevant social media accounts.

List of the pieces published by EURACTIV Network:

1. EU research looks into large-scale integration of renewables
2. Viac ako polovica elektriny z obnoviteľných zdrojov? Výskum ukáže, ako na to
3. Více než polovina elektřiny z obnovitelných zdrojů? Výzkum ukáže, jak na to
4. UE inwestuje w badania, które umożliwią integrację OZE na szeroką skalę
5. 'Yes, we can': Franco-Irish lead EU-wide research project aims to boost green electricity intake
6. Ako bude vyzerať elektrický systém budúcnosti? Bude prepojenejší a flexibilnejší
7. Un projet de recherche franco-irlandais planche sur le stockage des renouvelables
8. Seán Kelly MEP on renewables: Member states should look at the big picture
9. MEP Seán Kelly: Wir müssen ein Backup für erneuerbare Energien haben
10. System flexibility as the key to a decarbonised and resilient European power system (video)
11. Europoslanec: Ľudia už obnoviteľným zdrojom veria, musíme presvedčiť vlády
12. Irish minister: We are the global leaders in taking variable renewable electricity onto the grid (video)
13. Írsky minister: Väčšinu elektriny máme z vetra a slnka, dokáže to aj Európa
14. Joint horizon2020 workshop: TSO-DSO cooperation in flexibility market integration (video)
15. 50% Renewables By 2030: Creating A Flexible Power System To Ensure Eu's Renewable Ambition Becomes A Reality
16. 50% Renewables by 2030: Creating a flexible power system to ensure EU's renewable ambition becomes a reality
17. EU renewable electricity hopes get welcome jolt
18. Zelená elektrina si vyžiada modernizáciu sietí
19. As wind and solar power rise, EU seeks more grid 'flexibility'
20. Nárast podielu elektriny z vetra a slnka vyžaduje väčšiu flexibilitu siete
21. Interview with Gonzálo Escribano on Spanish Recovery and Resilience Plan

22. Energy digitization: Business want compensation for sharing user data
23. Slovak Economy Ministry to support the storage of renewable energy. Both hydrogen and batteries are in play
24. Mariano Marzo: Energy transition in the EU must be realistic and include verifiable sustainability objectives
25. Slovakia has met its targets for renewables. Most green energy is in electricity generation
26. From the north of Germany to Bavaria via Slovakia. Unplanned electricity flows are a problem, although a smaller one than in the past
27. Fernando Ferrando: Maintaining Spanish nuclear power plants is mortgaging future generations
28. Eclipses may cause problems. What are the pitfalls of electricity from solar or wind and how to solve them?
29. Most European countries subsidize more fossil energy than renewables. It also applies to Slovakia
30. Decarbonised electricity generation will not be free. There are eight challenges ahead
31. EURACTIV presents European Special Report on EU-SysFlex Project
32. Power grid flexibility vital to 'avoid blackouts', EU's Sefcovic says
33. La flexibilité du réseau électrique est essentielle pour « éviter les coupures », selon M. Sefcovic
34. Батериите и водородът могат да осигурят гъвкавост на елмрежата в ЕС
35. Σέφτσοβιτς: Η ευελιξία του δικτύου ηλεκτρικής ενέργειας «κλειδί» για την αποφυγή διακοπών ρεύματος
36. Think-tank: Bulgaria will be a net importer of electricity after 2030
37. Francisco Espinosa: I prefer not to owe electric companies anything
38. Thore Sekkenes from European Battery Alliance: We will have to satisfy a huge demand in the EU
39. Carbon Border Adjustment Mechanism, a tool of asymmetric consequences
40. Poland is not ready for a blackout
41. Przerwy w dostawie prądu? Polska nie jest gotowa na blackout [WYWIAD]
42. José Luis Garcia from Greenpeace: Brussels has bowed to the nuclear lobby
43. José María González from APPA Renovables: Nuclear and gas in taxonomy distract from climate and energy objectives
44. Renewable energy contracts are not working. Guarantees from EIB are supposed to help
45. Expensive gas has slowed the withdrawal from coal, renewables are more attractive
46. German electricity grid upgrade 'will be expensive', experts warn
47. France moves towards more flexible electricity system
48. Dans le sillage de l'UE, la France s'oriente vers un système électrique plus flexible
49. Frankreich auf dem Weg zu einem flexibleren Stromsystem
50. How to balance the energy system in Poland after coalexit?
51. Energy storage: Key to the effective use of renewables?
52. Atom, blackout, dekarbonizacja, OZE: Wszystko co trzeba wiedzieć o transformacji energetycznej
53. Magazyny energii: Klucz do efektywnego wykorzystania energii odnawialnej?
54. Smart grids. Will they provide better energy efficiency?
55. Niższe rachunki za prąd: Staną się możliwe dzięki inteligentnym sieciom energetycznym?
56. How does cross-border electricity trade work in Europe?
57. W jaki sposób działa transgraniczny handel energią elektryczną w Europie?
58. Jak zbilansować system energetyczny w Polsce odchodząc od węgla?
59. Rozvoj obnoviteľných zdrojov brzdia technické prekážky
60. EU-Kommissar Sefcovic: Flexibilität des Stromnetzes ist entscheidend
61. Fleksibilnost električne mreže ključna je za 'izbjegavanje nestanka struje', kaže Šefčovič
62. ЦИД: България вероятно ще бъде нетен вносител на електроенергия след 2030 г.

63. What to do to produce more wind energy in Poland?
64. Marine (floating) photovoltaics in Poland. When the sun meets the water.
65. Hydrogen in Poland: A real alternative as an energy source?
66. Co zrobić, by w Polsce produkować więcej energii z wiatru
67. Morska (pływająca) fotowoltaika w Polsce. Kiedy słońce spotyka wodę
68. Wodór w Polsce: Realna alternatywa jako źródło energii?
69. Kadri Simson: España tiene una red «excelente» para recibir gas natural licuado
70. Sergio Martín, presidente de ACA: «Se puede ser 'pobre energético' y tener una abultada nómina»
71. Σκρέκας: Πρόταση για τη δημιουργία ενός Ευρωπαϊκού Μηχανισμού Αλληλεγγύης για την ενεργειακή κρίση
72. A Greek initiative for an EU Energy Crisis Solidarity Facility
73. Bełchatów: Now the largest mine in Europe. Tomorrow, RES and a green future?
74. Poland's road to nuclear: Will it pay off?
75. Bełchatów: Dziś największa kopalnia Europy. Jutro OZE i zielona przyszłość?
76. Polska droga do atomu: Czy to się w ogóle opłaca?
77. Project blog: The outcomes of the EU-SysFlex Project
78. Action plan for strengthening electricity network to integrate renewable energy sources

EURACTIV.com
Page views: 6 269
Social media reach: 5 688

EURACTIV Poland
Page views: 6 662
Social media reach: 9 587

EURACTIV Slovakia
Page views: 5 780
Social media reach: 11 495

EURACTIV Spain
Page views: 2 172
Social media reach: 10 826

3.6.2 COMMUNICATION IN GENERAL MEDIA

Communication in general media involved:

- Publication of articles related to the EU-SysFlex project (reports on activities, outcomes, etc.)
- Interviews with representatives of the project consortium, or other relevant experts, on the activities or outcomes of the EU-SysFlex projects, or related issues

The main aim of the communication in general media was to raise awareness of the project activities and outcomes within the public.

All project partners were encouraged to be involved in the communication with general media, supported by the WP11 leader. Partners were encouraged to use their contacts, network, communication channels to spread the information about the project. Partners should have informed the WP11 leader about any project related publications for the purposes of reporting.

List of pieces published:

1. Project EU-SysFlex in Engerati, Europe's largest engaged community of utilities and power sector professionals
2. Independent
3. Irish Engineers Journal
4. Polish Energetyka 24
5. Global Transmission Report
6. Universidade do Porto
7. Journal Economico
8. Portuguese InovGrid
9. ENTSO-E Member Brief
10. Päike ja tuul energiasüsteemi
11. BRIDGE Newsletter
12. Cornwall Insight Ireland: Old friends: the hidden good side of the EU
13. 7th BRIDGE Newsletter
14. Dr. Sebastian Wende-von Berg: EU-SysFlex features challenges and experience from almost the whole Europe
15. Proyecto EU-SysFlex, el plan europeo que transformará la red eléctrica para cumplir con los objetivos climáticos
16. Silicon republic: EU-Sysflex: A massive project aiming to create a 'European energy union'
17. Fetch.ai multi-agent system optimization provides real-world benefits to energy sector
18. CORDIS: Transforming the EU power grid to realise climate goals
19. BRIDGE Newsletter #8
20. The Energy Storage Daily
21. Interview with EU-SysFlex project manager John Lowry: The future is a European energy union
22. BRIDGE Newsletter #9
23. Silicon Republic: What challenges are there in creating a renewables-led European super grid?
24. BRIDGE Newsletter
25. Recognition of EU-SysFlex in RGI brochure
26. Interview with Project Director John Lowry

3.6.3 PRESS RELEASES

Project consortium issued press releases to inform about major activities (such as stakeholder events, conferences, etc.) organized by the EU-SysFlex consortium, or attended by its representatives, or about major project outputs and outcomes.
Preparation of the press releases was coordinated by EURACTIV and if relevant, discussed with individual members of the project consortium involved in the concrete activity / output.
Final versions of the press releases were approved by the Project Coordinator.

List of published press releases:

Press release on EURACTIV
EU-SysFlex celebrates its first year
EU-SysFlex celebrated project's two-year anniversary in Tallinn

3rd year celebration of the EU-SysFlex project and General Assembly online
Ambitious targets for renewables in electricity generation require power grid reforms

Examples of project articles:

1. Kick-off meeting in Dublin
2. First three EU-SysFlex technical deliverables published
3. Concept grid: a new test platform set-up by EDF R&D for smart grid systems
4. Estfeed: data exchange platform by Elering
5. Elering and ESO signed cooperation agreement to pilot cross-border data exchange between Estonia and Lithuania
6. "The key word is flexibility". A DSO perspective on EU-SysFlex by EDP Distribuição CEO João Torres
7. VIDEO: EU-SysFlex General Assembly 2018 in Lisbon
8. EU-SysFlex explained in a video
9. First meeting of the Advisory Board
10. Joint Horizon2020 workshop to take place prior to InnoGrid conference
11. "We have to improve data sharing between TSOs and DSOs." A view by Rui Pestana of REN, the Portuguese TSO
12. "Virtual power plant enables us to decrease the cost of energy from renewables." Stefan Löw explains his work with Siemens and EDP
13. The launch of FlexTech Integration Initiative consultation
14. EU-SysFlex invites you to its Brussels workshop
15. Elering CEO Taavi Veskimägi: "We can empower the consumers with data"
16. EU-SysFlex webinar #1: Technical Shortfalls for Pan European Power System with High Levels of Renewable Generation
17. EU-SysFlex webinar #2: Financial Implications of High Levels of Renewables on the European Power System
18. EU-SysFlex webinar #3: Conceptual market organisations for the provision of innovative system services: role models, associated market designs and regulatory frameworks
19. EU-SysFlex webinar #4: Impact analysis of market and regulatory options through advanced power system and market modelling studies
20. EU-SysFlex video: Project Demonstrations
21. Description of data exchange use cases based on IEC 62559 methodology published
22. EU-SysFlex webinar #5: Big data considerations and solutions for flexible energy systems
23. EU-SysFlex webinar: Demonstrations of easy access to data and easy access to flexibility market
24. EU-SysFlex publishes its second flyer
25. Joint public webinars by H2020 projects: EU-SysFlex and OSMOSE
26. EU-SysFlex webinar | How to take the EU-SysFlex Exploitable Results to the market
27. EU-SysFlex webinar | Mitigation of technical scarcities associated with high levels of renewables on the European power system
28. SAVE THE DATE | EU-SysFlex Final Webinars
29. EU-SysFlex Final Project Video
30. EU-SysFlex Final Technical Event on Project Demonstrations on 14 February 2022

3.7 PROJECT BLOG

Objective: Inform about developments (research, technology, policy) related to the topic of the project, and project activities and outputs.
Frequency: 1 entry per month (or ad hoc) starting in February 2019
Length: 500 – 1000 words Published at: Blogging and EU-SysFlex website (http://eu-sysflex.com/category/news/).
Target groups: Policy actors and decision-makers at the European level, decision-makers at the national level, industry, research, and academia. Blog must be understandable even without deep technical knowledge about the project or the electric system. Example: http://smartnet-project.eu/interviews/grids-transition-vito-evolution-dsos-tsos/
Thematic focus: Activities in WP 1 – 10. Focus on explaining a specific activity within the WP, how it contributes to the objectives of EU-SysFlex, who works on it, what the achieved results and next steps are etc. Connecting the activity to current developments in the energy sector is welcome.
Authors and responsibility: WP leaders (they author the blog entries or delegate a substitute author), + PC and TM
Editor: EURACTIV
Editing process: Editor edit content and style, add and/or modify title, lead paragraph, subheadings; final version will be sent to author for approval

While other communication channels (i.e., project website, press releases) include official content of the whole consortium, project blog entries reflect individual views of the author(s) that may not reflect official positions or communication of the project / project consortium. This information is clearly stated on the blog website.

	Focus	Responsibility
1	Introduction	EirGrid
2	Project concept	EDF TM
3	The “supermarket” approach is one way of managing future electric grids	VITO
4	Data management	Elering
5	Overview of WP6	innogy/ MITNETZ
6	How the project is testing via innogy and MitnetzStrom what is legally required in German grids for 2021	innogy/ MITNETZ
7	Overview of Demos	EDF TM
9	Description and objectives of the Italian demo with reference to the EU and Italian scenario	EDIS/ RSE
10	First Implementation of EU-SysFlex Demonstrator running at Mitnetz (IEE)	IEE
11	Battery Energy Storage System	Helen
12	Data Management	Elering
13	Detailed small scale simulation is running with first results (Uni Kassel)	Uni Kassel
14	either about one of the forecasting tools from the Finnish demo, or about their integration in the aggregation tool.	VTT
15	First Results from the field test demonstrator in EU-SysFlex	University of Kassel/Fraunhofer IEE
16	Virtual power plant	EDP

17	Overview of WP8 demo	EDF
18	Three policy recommendations from the impact analysis of market and regulatory options in the pan-European power system through advanced power system and market modelling	VITO
19	Design options of TSO/DSO coordination	innogy
20	RSE about results from D6.3	RSE
21	First field results	IEE/ MITNETZ
22	Cybersecurity and privacy domain and relationship to Sysflex data exchange and WP 5 and related demos in WP9	Guardtime
23	Flexibility Hub	EDP/ INESCTEC
24	EU-SysFlex French Virtual Plant: Multi-services provision by storage successfully demonstrated through local tests	EDF
25	First results Finnish demo: Batteries and EV charging points as electric grid balancers in a smart office environment	Helen
26	EU-SysFlex French Virtual Power Plant: FCR provision by wind successfully demonstrated through local tests	EDF
27	New ways of energy data exchange demonstrated	Enoco, Elering, AKKA
28	Joint EU-SysFlex and OSMOSE workshops: Interesting insights shared between them	EDF
29	EU-SysFlex Flexibility Roadmap	UCD,EDF
30	EU-SysFlex data exchange activities completed by proposing ‘European conceptual model’	Elering
31	Exploitation of the project’s selected results	ESADE
32	The outcomes of the EU-SysFlex Project	EDF

TABLE 8: LIST OF BLOG ENTRIES

4. COPYRIGHT

This project has received funding from the European Union's Horizon 2021 research and innovation programme under EC-GA No 773505.