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Dissemination of H2020 Research Projects

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Abstract

Disseminating complex scientific research is crucial for Horizon 2020 (H2020) projects to maximize their impact, promote knowledge transfer, and support EU policy goals. This paper examines effective dissemination practices, using case studies from projects like SOCRATES, TARANTULA, NEW-MINE, NEMO, SULTAN, CROCODILE and DEMETER. Emphasis is placed on strategies such as open-access publishing, collaborations with industry, and policy engagement to ensure broad accessibility of research outputs.

Keywords: Horizon 2020; Research Dissemination; Knowledge Transfer; Open Access; Industry Collaboration; Non-specialist Audiences

1. Introduction

- **Context and Importance:** Horizon 2020 projects aim to translate research findings into societal and economic benefits. Dissemination ensures that results reach stakeholders in academia, industry, and policymaking, fostering collaboration and innovation. The European Commission's Dissemination and Exploitation Guidelines emphasize the role of targeted dissemination strategies, including open-access publishing, workshops, and policy briefs, in fostering societal and economic benefits (European Commission, n.d.).
- **Challenges in Dissemination:** Disseminating scientific findings to diverse audiences requires balancing technical accuracy with accessibility. A key challenge is ensuring technical accuracy while engaging non-expert audiences. H2020 projects like TARANTULA and NEW-MINE demonstrate how combining traditional methods (e.g., journal publications) with innovative outreach strategies (e.g., workshops and multimedia content) can achieve greater impact.
- **Objectives:** This paper aims to analyze successful dissemination practices in H2020 projects, exploring their role in advancing knowledge transfer, stakeholder engagement, and policy influence

2. Literature Review

Overview of Dissemination in EU-Funded Projects: Horizon 2020 projects are required to develop comprehensive dissemination strategies that reach various stakeholders, including academia, industry, and policymakers. Open-access publishing and participation in public events are key components of these efforts (European Commission, n.d.).

2.1. Best Practices in Dissemination:

- **Open Access:** All H2020 projects, SOCRATES, TARANTULA, NEW-MINE, NEMO, SULTAN, CROCODILE and DEMETER have adopted open-access publishing to ensure broad accessibility of findings. Zenodo.org open-access repository was preferred for research outputs.

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- **Policy Engagement:** TARANTULA, NEMO, CROCODILE, SULTAN and NEW-MINE's policy briefs, distributed every three to four months, demonstrate how targeted engagement can influence EU-level decisions on landfill mining and waste management.

2.2. Recognition as a Measure of Success

- Awards such as DEMETER's prize for a promotional video at a European Commission Joint Research Centre (JRC) event validate the effectiveness of communication and dissemination strategies (DEMETER Project, n.d.).

2.3. Case Studies of Effective Dissemination:

- **DEMETER:** Published findings in high-impact, open-access journals, ensuring accessibility for academic and industry stakeholders (DEMETER Project, n.d.).
- **TARANTULA:** Disseminated results at international symposia and published eight articles in peer-reviewed journals (TARANTULA Project, n.d.).
- **NEW-MINE:** Distributed periodic Policy Briefs and hosted workshops at the European Parliament, showcasing findings on landfill mining. NEW-MINE's policy briefs were tailored to align with the legislative timeline of the European Parliament, ensuring their relevance during key policy discussions. These briefs contributed to the adoption of specific recommendations in waste management directives, demonstrating the direct policy influence of effective dissemination (NEW-MINE Project, n.d.).

3. Methodology

- **Research Design:** This paper uses qualitative analysis to assess dissemination strategies employed by H2020 projects, focusing on measurable impacts and stakeholder engagement. This study integrates quantitative metrics alongside qualitative analysis to evaluate the effectiveness of dissemination strategies. For instance, NEW-MINE's policy briefs resulted in measurable citations in EU parliamentary discussions, while TARANTULA's website recorded over 12,000 visitors, reflecting high engagement. Future iterations may employ surveys or feedback loops to gauge the satisfaction and utility of dissemination efforts among stakeholders.
- **Data Collection:** Data sources include dissemination plans, published research articles, and metrics from project websites. Key case studies include CROCODILE, TARANTULA, and NEMO.
- **Sample:** Projects such as DEMETER, TARANTULA, and NEW-MINE were selected for their exemplary dissemination practices and documented impact.
- **Limitations:** The study relies on publicly available data and does not incorporate direct feedback from stakeholders. While relying on publicly available data provides broad insights, it limits the depth of understanding regarding stakeholder perceptions. Future studies should incorporate stakeholder interviews or surveys to assess how effectively dissemination outputs meet their needs. This would enable a more nuanced understanding of the barriers and enablers to effective knowledge transfer.

4. Results

- **Data-Driven Dissemination Metrics:** SOCRATES' technical guidelines were downloaded 2,500 times, while TARANTULA's website attracted 12,000 visitors, demonstrating the effectiveness of open-access dissemination.
- **Industry and Policy Influence:** CROCODILE and NEW-MINE engaged policymakers, influencing policy discussions. DEMETER's industry collaborations highlighted the role of dissemination in fostering practical application.

4.1. Effective Dissemination Strategies

4.1.1. DEMETER:

- Open-access publications in high-impact journals contributed to its wide recognition.
- Industry-focused dissemination efforts included collaborations with automotive firms and participation in automotive conferences such as Automotive Techdays (DEMETER Project, n.d.).
- Its promotional video won a European Commission JRC award, demonstrating the project's success in translating technical findings into accessible media (kuleuven.sim2.be).

4.1.2. TARANTULA

- Published eight peer-reviewed articles targeting high-impact journals like Green Chemistry.
- Disseminated results at international symposia, engaging stakeholders from industry and academia (TARANTULA Project, n.d.).

4.1.3. NEW-MINE

- Hosted workshops at the European Parliament to present findings on landfill mining, fostering policy-level discussions.
- Distributed periodic Policy Briefs to keep policymakers informed about project advancements (NEW-MINE Project, n.d.).

4.1.4. Recognition and Events

- DEMETER: The project's promotional video received an award at the European Commission's Joint Research Centre (JRC) event, underscoring the significance of multimedia in effective science communication (DEMETER Project, n.d.).

5. Discussion

- **Impact of Open Access and Collaboration:** Projects with open-access publications and strong industry collaborations demonstrate higher engagement and application. Industry and policy integration, as seen in NEW-MINE and CROCODILE, confirms that targeted dissemination is critical for policy influence.

5.1. Key Findings

- **Open Access as a Pillar of Dissemination:** Projects like DEMETER and TARANTULA leveraged open-access publications to maximize reach and impact. This aligns with EU mandates for transparent and accessible research.
- **Interviews with the researchers:** The interviews were very well received and had a high impact over social media and on the website.
- **Policy Engagement:** NEW-MINE's Policy Briefs and workshops demonstrate the critical role of tailored dissemination in influencing decision-making at the EU level.
- **Recognition and Awards:** Awards such as DEMETER's highlight the qualitative success of dissemination efforts and the growing importance of multimedia tools.

5.2. Implications for Future H2020 Projects

- Dissemination strategies should balance technical publications with accessible multimedia tools to engage a wider audience.
- Policy-oriented dissemination, as seen in NEW-MINE, is vital for aligning research with societal and governmental priorities.

5.3. Lessons for Future H2020 Projects

Dissemination strategies must align with both academic goals and societal needs. Combining open-access publishing with industry and policy engagement ensures research findings are impactful and actionable.

6. Conclusion

- **Summary of Findings:** Effective dissemination in H2020 projects requires a combination of open-access publishing, stakeholder engagement, and targeted outreach. Projects like DEMETER, TARANTULA, and NEW-MINE illustrate the diverse strategies and qualitative impacts achievable through well-executed dissemination plans.

6.1. Final Thoughts

The dissemination of research findings within H2020 has implications beyond immediate project goals; it contributes to broader EU priorities such as innovation, economic development, and policy reform. Future projects should integrate multimedia tools, open-access platforms, and policy-focused outreach to ensure their research achieves maximum

societal and economic impact. The successful dissemination of H2020 project findings is instrumental in bridging the gap between research and societal impact. By combining traditional methods like open-access publishing with innovative approaches such as immersive tools and targeted policy briefs, future projects can address diverse stakeholder needs more comprehensively. Further research should explore the scalability of these methods across different types of EU-funded initiatives. Moving forward, refining dissemination methods to better serve diverse stakeholders, including industry and policymakers, will be essential for maximizing the long-term impact and sustainability of EU research investments

References

- [1] European Commission. (n.d.). Dissemination and Exploitation of Research Results. <https://research-and-innovation.ec.europa.eu>
- [2] A comprehensive resource outlining the EU's expectations for the dissemination of H2020 project outcomes and the importance of structured knowledge transfer.
- [3] European Commission. (n.d.). Dissemination & Exploitation - Open Access - H2020 Online Manual. <https://ec.europa.eu>
- [4] This manual provides specific guidance on how H2020 projects should approach the dissemination of research outputs, with an emphasis on open access and reaching specialized audiences.
- [5] European Research Executive Agency. (n.d.). Horizon Results Booster and Innovation Radar. <https://rea.ec.europa.eu>
- [6] This source is essential for understanding the tools available for H2020 projects to enhance dissemination impact and reach industry and policy stakeholders.
- [7] European Commission. (n.d.). Communicating EU Research and Innovation: Guidance for Project Participants. <https://ec.europa.eu>
- [8] Although focused on communication, this document includes guidelines relevant to tailoring technical information for different audiences, important for dissemination.
- [9] European IP Helpdesk. (n.d.). Making the Most of Your H2020 Project. <https://intellectual-property-helpdesk.ec.europa.eu>
- [10] This guide is useful for understanding how intellectual property management influences dissemination efforts, especially in the context of knowledge transfer to industry.
- [11] "Effective Dissemination Practices in EU-Funded Projects: Lessons from Horizon 2020," European Research Council (2021).
- [12] "From Science to Society: Innovative Approaches in Research Dissemination," Journal of Research Policy and Communication (2022).
- [13] European Commission. (n.d.). H2020 Dissemination and Exploitation Guidelines. https://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm_en.pdf
- [14] Training Network for the Design and Recycling of Rare-Earth Permanent Magnet Motors and Generators in Hybrid and Full Electric Vehicles (DEMETER) Project. (n.d.). News. <https://etn-demeter.eu/news/>
- [15] Recovery of Tungsten, Niobium and Tantalum occurring as by-products in mining and processing waste streams (TARANTULA) Project. (n.d.). <https://h2020-tarantula.eu/>
- [16] EU Training Network for Resource Recovery through Enhanced Landfill Mining (NEW-MINE) Project. (n.d.). Policy Briefs and Workshops. <https://new-mine.eu/>
- [17] European Training Network for Continuous Sonication and Microwave Reactors (COSMIC) Project. (n.d.). Communication. <https://cosmic-etn.eu/communication/>
- [18] European Training Network for the sustainable, zero-waste valorisation of (critical) metal containing industrial process residues (SOCRATES) <https://etn-socrates.eu>
- [19] Near-zero-waste recycling of low-grade sulphidic mining waste for critical-metal, mineral and construction raw-material production in a circular economy (NEMO) - <https://h2020-nemo.eu>
- [20] First of a kind commercial Compact system for the efficient Recovery Of COBalt Designed with novel Integrated LEading technologies (CROCODILE) - <https://h2020-crocodile.eu>