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# Introduction

The EU has a precarious relationship with its citizen. Ever increasing politicization of the EU politics, more specifically the EU integration, has repeatedly shown that the EU have a veritable popular legitimacy problem. The failure of constitutional referendum, the infamous Brexit decision, and the rise of Eurosceptic mobilization(Meijers & Rauh, 2016) have clearly demonstrated the EU no longer enjoys a permissive consensus from the citizenry. The supranational actors are not only at the receiving end of such controversial public debates. In principle, they can participate in such public debates in order to defend themselves and give account of their exercise of political power, thus foster their popular legitimacy. Primary tool for this is the public communication channels of the supranational actors (Ecker-Ehrhardt, 2018, 2020).

While the public communication remains to be one of the essential tools to handle increasing politicization, the EU supranational actors seem to face endogenous and exogenous obstacles in using the tool in its full potential. Internally, the EU supranational actors seem to prefer de-politicize their activities (Biegoń, 2013; Bressanelli et al., 2020; De Wilde & Zürn, 2012; Schimmelfennig, 2020) by adopting a technocratic language ladened with jargon and inaccessible to wider public (Rauh, 2021; Rauh et al., 2019). What is more, the public communication efforts of the EU seems to be plagued by internal conflicts and competition over limited resources (Altides, 2009; Bijsmans & Altides, 2007). Externally, the EU faces public spheres fractured along national borders and national languages, thus forcing the EU to communicate with its citizens through national political elites, and national media (Koopmans & Statham, 2010; Risse, 2014; Trenz, 2004; Walter, 2015). What is more, the EU issues are selectively covered in national media, giving prominence to certain actors and stories, mainly prioritizing events and actors that have significant news value in their selection (Trenz, 2008; Wilde, 2019; de Vreese, 2001; de Vreese et al., 2006). Extant literature on media coverage of EU affairs observes that the primary focus of news coverage is major events such as EU summits, elections, enlargement, and scandals (Boomgaarden et al., 2013; Vreese, 2001; Hobolt & Tilley, 2014). This is partially due to public communication practices of the EU itself; journalists often have to make do with very complex, voluminous, and scattered political information from the EU supranational actors, making it even harder to transfer the EU public communication to the national public spheres (Martins et al., 2012; Statham, 2008, 2010).

While they are not the panacea to all the public communication ailments of the EU, social media platforms offer opportunities for reproduction of popular legitimacy via public communication for the EU. First, social media have the potential to transcend national boundaries by enabling the citizens to engage a diverse set of content beyond nationally generated ones (Bossetta et al., 2017). This, in turn, creates an opportunity for the EU to reach out to the citizenry without the limitations of traditional communication channels. Secondly, social media platforms imbue users with a degree of gatekeeping power (Wallace, 2018). The decentralized gatekeeping structure in social media platforms, where users themselves can choose which topic will be allowed to the information environment, permits the EU to determine which issues to inject into the information environment, thus enabling the EU to circumvent the editorial selection of journalists to a certain extent. Thirdly, social media platforms are very cost-efficient tools of communication for communicators. It takes mere minutes to set up an account and they are often very easy to maintain. Lastly, social media provide low hurdle and continuous information source for the users. Unlike static webpages of web 2.0, social media does not require the user to consciously and actively go to a website to learn about the EU. Users only need to follow the relevant social media accounts to stay in contact.

Against this backdrop, we set out to investigate the EU supranational actors[[3]](#footnote-3) on social media platforms, specifically Twitter. The goal of this article is two folds. The first aim is to establish necessary and sufficient conditions for the different public communication practices to reproduce the popular legitimacy. The second aim is to investigate how and to what extend the EU supranational public communication meets these criteria. To this end, building on extant public accountability and communication deficit literatures, we focus on three sets of indicators. First, citizen engagement requires understandability, and we quantify reading ease and word familiarity of EU tweets. Second, engagement requires clarification of political action, and we exploit part-of-speech structures to see whether the tweets clarify who does what. Third, engagement requires responsiveness, and we quantify the amount of two-way communication by the EU accounts utilizing retweets and replies by these accounts. These indicators, their variation across different EU accounts, and benchmarks from random tweet samples by national citizens, tweets from various international organizations and the UK government, provide a novel empirical perspective on the quality of the EU public communication on Twitter.

This article is organized in six sections. In the next section, we review the extant literature on legitimacy of the EU and sketch out how different modes of public communication on social media can help with the popular legitimacy. In the third, section we turn our attention to the necessary and sufficient conditions for this goal. The fourth section presents our research design, data and methods. In the fifth section, we demonstrate our results and evaluate our findings vis-à-vis necessary and sufficient conditions. The last section concludes the article with a discussion of possible ways to improve public communication on social media in the light of our findings and offer further research venues.

# Legitimacy deficit of the EU

## Para 1:

* Introduction: what kind of legitimacy problem

## Para 2:

* Legitimacy deficit: input legitimacy

## Para 3:

* Legitimacy deficit: output legitimacy

## Para 3:

* Legitimacy deficit: throughput legitimacy

## Para 4:

* Legitimacy deficit: communication deficit

## Para 5:

* Different public communication strategies and how they can help with legitimacy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Public communication strategy | Interlocutors | Potential effect | Contribution to legitimacy | Possible success condition |
| One way communication | EU -> Citizenry | 1. Educate, 2. Image management 3. Priming(?) | * All types legitimacy | 1. Transparency 2. Publicity |
| Networked | EU (<)-> other public figures | 1. Educate, 2. Borrow legitimacy 3. Priming | * All types of legitimacy | 1. Transparency 2. Publicity |
| Dialogic communication | EU <-> citizenry | 1. Build good relationship with citizenry 2. Co-creation of policies and agenda | * Democratic legitimacy | 1. Exercise 2. Publicity |

# Public communication and the EU’s legitimacy

### Para 1:

For one - way public communication to reproduce the legitimacy of a political system, it needs to provide both transparency and publicity for the political system(Hüller, 2007). Transparency, in this sense, means that public communication regularly publishes political acts, processes, issues and responsibilities in the decision making in the political system without any severe restrictions in the visibility. This way, the public communication provides the audience of the political authority with the necessary information to make an informed decision in democratic feed-back processes. However, providing a transparency is only a necessary condition for public communication to reproduce political legitimacy. To achieve this aim, the public communication needs to garner publicity for the political system. Publicity, in this case, refers to the fact that the audience of the political authority becomes aware of the issues, acts and processes of the political system. In other words, putting information on the ether is not enough for reproducing political legitimacy. The transparency information needs to be consumed by the citizenry and incorporated into citizens’ political knowledge structure.

### Para 2:

* Necessary and sufficient conditions for publicity

Besides the content of the messages, there are several structural features of a public message that can establish publicity. First of which is the comprehensibility of the public communication messages. On text level, political messages that have lower semantic and syntactic complexity strongly influence political knowledge acquisition and engagement with the messages(Bischof & Senninger, 2018; Eveland et al., 2004; Spirling, 2015). Semantic complexity of a message refers to the difficulty of comprehension of the words and phrases in the message (eg: relevant vs pertinent). Syntactic complexity, on the other hand, refers to the difficulty of the grammatical characteristics of texts such as long noun phrases, and clauses (eg: the tall man stands next to the door vs the man who is tall and standing next to the door). Complex messages requires more cognitive resources to be processed and incorporated into the knowledge structure (Lang et al., 2007; Tolochko et al., 2019), thus reducing the knowledge acquisition and engagement with the political message. Besides the comprehensibility of message text, multimodality in a public message can assist comprehensibility of a message, thus further increasing the likelihood of creating publicity via public communication. As the adage succinctly puts it, a single image can worth thousand words. Presenting information via visual medium improves information comprehension and recall (Hibbing & Rankin-Erickson, 2003). Moreover, the visual materials such as powerful images or videos can serve as an “attention hook” that pulls the audience in and encourage them to pay more attention to the public message (Dhanesh & Rahman, 2021).

Another way that the public communication can contribute to the overall legitimacy is by improving and reinforcing democratic legitimacy of the political system via two-way symmetric, or dialogical, communication practices.

### Para 3:

* Communication deficit: internal problems

The extant research has time and again shown that the EU public communication faces severe endogenous and exogeneous obstacles meeting these conditions in their public communication.

### Para 3:

* Communication deficit: external problems

### Para 4:

* Attempts at remedying communication deficit

### Para 5:

* How can public communication via social media help with legitimacy deficit
  + Meritocratic legitimacy (Meyer 1999)
  + SoMe: direct communication with citizens, thus a solution to external communication problems
  + Volume: telling what the EU does helps with output legitimacy
  + Ease-of-reade: makes the EU politics comprehensible
  + Interactivity: build connection with the audience so that audience feels heard
  + Political responsiblity reporting: Helps with transparency, because now the audience knows who is responsible for what

# Data collection

## Supranational tweets and relevant benchmarks

To study supranational communication on Twitter, our data collection starts with identifying the population of relevant accounts. Our selection follows two basic considerations. Firstly, we want to gain a clear picture of the EU’s public communication as a polity [CITATION HERE]. The accounts we analyze should thus collectively reflect the branches of the EU that exercise political authority (in the sense of taking or at least contributing to collective decision-making in the supranational polity). Secondly, extant research highlights that especially the executive branches of the EU (i.e. the supranational institutions in the narrow sense) such as the Commission and the ECB, are often the core subjects of EU politicization in national media. It is often the institutional legitimacy of executive EU actors that is questioned and equated with the overall EU legitimacy in minds of citizens (Silva et al., 2021).

Accordingly, we identified the Twitter accounts of the EU’ supranational institutions (e.g. @EU\_Commission), their sub-branches (e.g. *@EUHomeAffairs*) and dedicated EU agencies (e.g. *@Frontex*), as well as the personal accounts of the individuals heading these institutions such as Commissioners (e.g. *@TimmermansEU*), Director-Generals (e.g. *@lemaitre\_eu*), or agency heads (e.g. @stefanomanservi). Including only accounts that are verified by Twitter to be actually owned by the person or organization they claim to represent (as indicated by the blue check mark badge on the platform), we end up with *115 active supranational Twitter accounts*. The full list is provided in Appendix XXX. For each of these supranational accounts we have then collected all tweets between the date an account was created and May 3 2021 through the Twitter API 2.0 academic track, resulting in a dataset of *1,065,203 individual tweets*.

While this offers a thus far unprecedented empirical perspective on the social media messages of supranational actors, the information it contains cannot be easily assessed in some absolute sense. Thus, to put supranational communication behavior on Twitter into perspective, we collected *three additional benchmark datasets*.

The first benchmark simply aims to establish what constitutes ‘normal’ behavior on the platform through a by-and-large *random sample of tweets*. To construct this sample, we streamed in tweets from 26 of the EU countries for a week with five-minute windows through Twitter Decahose API. This generates X,XXX,XXX tweets that we can use as a baseline for ‘typical’ tweet features.

More importantly, however, we have to note above that the particular legitimacy challenges that EU actors face emerge from the fact that – in Delors’ words – the EU is an unidentified political object. On the one hand, its competencies approximate that of a nation state. On the other hand, it carries significant markers of an international organization where member states guide and decide on how the political authority will be exercised. Our other two benchmark data sets thus focus on comparing supranational media communication to exactly these different levels of governance.

To approximate communication of national governments, we target the current UK government ministers, ministries, executive offices, agencies and individuals who are in charge of these institutions (see appendix XXX for the full list of XXX accounts). Collecting the data analogously to the supranational EU actors above, this results in a benchmark of XXX,XXX tweets. To approximate communication of international organizations, we identified IOs that have a roughly similar policy scope as the EU, picking those organizations that are in the range of one standard deviation around the EU with regard to the number of policy areas covered as provided in the MIA data set (Hooghe et al., 2017). We identified their Twitter accounts along the list collected and kindly shared by Matthias Ecker-Erhardt (2020; full list in Appendix XXX). This results in 55 accounts for which we could analogously collect 294,219 individual tweets for our final benchmark.

## Indicators

Besides describing and comparing the volume of supranational communication via Twitter, our primary interest lies in charting the characteristics of the collected tweets with a focus on what they can tell us about engaging with and engagement of citizens on this interactive platform. Along our discussion above, three blocks of indicators are of key interest here.

*Textual message content:* As noted above a necessary condition for engaging messages is that the message is easily understandable and graspable in the first place. Exploiting the validations and tools provided by Benoit, Spirling, and Munger (2019) we thus extract two features from the English-language elements of each Tweet (for details on text-preprocessing please refer to Appendix XXX and the scripts in the replication package). First, we measure syntactic and grammatical complexity by the Flesh/Kincaid reading ease score. This compound indicator of sentence and word length captures the required cognitive mobilization (often described by anchoring it in education levels) to grasp the textual content of a message. Second, we measure familiarity of the vocabulary supranational actors use. This is proxied by the average frequency by which the words in a given tweet occur in the overall Google Books corpus as the broadest available representation of the English language. The intuition is that words that are more common in the English language (as opposed to rarer technical and specialized jargon) are better known and thus more readily understandable by a broad audience. Furthermore, we assess whether a particularly positive or negative tone of the message is related to engagement by extracting the sentiment of expressed in its textual component along the Lexicoder Sentiment Dictionary (Young & Soroka, 2012).

*Multimedia message content*: Beyond text, the Twitter platform allows (or even encourages) various means of multimedia messaging. Symbols, pictures, or videos can transmit a large amount of information (Tang & Hew, 2018), rendering their usage also relevant for engaging political communication at least in principle. Thus, we initially extract and count the number of emoticons and other special symbols from the content of each tweet by resorting to the relevant Unicode blocks (see Appendix XXX as well as the replication scripts for details). We also store whether a Tweet contains embedded pictures and/or videos as well as links to external URLs from the entities URL field offered by the Twiter API.

*Engagement with other users and debates*: As a decidedly interactive platform, Twitter offers supranational actors not only the possibility to propagate their own messages but also allows them to amplify (retweet), respond to (reply), or contextualize (quote) the messages of other platform users. To see to what extent supranational actors make use of these more dialogue-oriented features of the platform, we study the shares of retweets, replies, and quotes in the overall amount of supranational messages. In addition, we extract direct, linked references to other Twitter users – so-called @-mentions – from the tweets as they also indicated the willingness to actively speak about and with other actors. Finally, we consider the number of hashtags per tweet, a common way to cross-reference a message to a specific subject or theme debated on the platform.

*Engagement of other users*: Ultimately, we want to study in how far supranational messages result in user engagement. We focus on the main engagement tools that the platform offers. Likes (or favorites in Twitter parlance) allow the user to express a favorable attitude towards a given message through a red heart button. Retweets allow users to amplify the message by directly sharing it, again with a simply click of a button. More proactive forms of engagement that also allow critical stances in principles are quotes and replies. Here users can either contextualize or directly respond to the message with own bits of texts and/or symbols. For each tweet, thus, we extract the counts of likes, retweets, quotes and replies from the user engagement statistics fields supplied by the Twitter API.

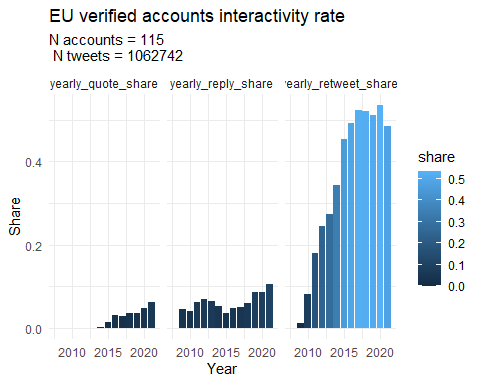
# Results and discussion

**Broad overview of the data**

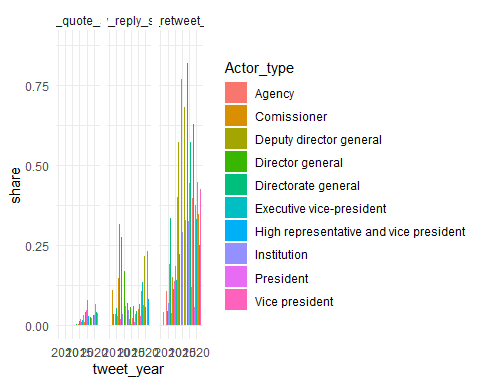
## Within sample comparision: communication performance of different EU accounts

### Ease of read:

### Interactivity:



## `summarise()` has grouped output by 'Actor\_type'. You can override using the `.groups` argument.

 **This is not a good graph**

### Political responsiblity reporting:

## Benchmarks: communication performance of the EU compared to IOs and national governments

### Ease of read

### Interactivity

### Political responsibility reporting:

# Conclusion

# References

Altides, C. (2009). *Making EU politics public: How the EU institutions develop public communication*. Nomos.

Benoit, K., Munger, K., & Spirling, A. (2019). Measuring and Explaining Political Sophistication through Textual Complexity. *American Journal of Political Science*, *63*(2), 491–508. https://doi.org/10.1111/ajps.12423

Biegoń, D. (2013). Specifying the Arena of Possibilities: Post-structuralist Narrative Analysis and the European Commission’s Legitimation Strategies. *JCMS: Journal of Common Market Studies*, *51*(2), 194–211. https://doi.org/10.1111/j.1468-5965.2012.02310.x

Bijsmans, P., & Altides, C. (2007). ‘Bridging the Gap’ between EU Politics and Citizens? The European Commission, National Media and EU Affairs in the Public Sphere. *Journal of European Integration*, *29*(3), 323–340. https://doi.org/10.1080/07036330701442315

Bischof, D., & Senninger, R. (2018). Simple politics for the people? Complexity in campaign messages and political knowledge. *European Journal of Political Research*, *57*(2), 473–495. https://doi.org/10.1111/1475-6765.12235

Bressanelli, E., Koop, C., & Reh, C. (2020). EU Actors under pressure: Politicisation and depoliticisation as strategic responses. *Journal of European Public Policy*, *27*(3), 329–341. https://doi.org/10.1080/13501763.2020.1713193

De Wilde, P., & Zürn, M. (2012). Can the Politicization of European Integration be Reversed?\*. *JCMS: Journal of Common Market Studies*, *50*(s1), 137–153. https://doi.org/10.1111/j.1468-5965.2011.02232.x

Dhanesh, G. S., & Rahman, N. (2021). Visual communication and public relations: Visual frame building strategies in war and conflict stories. *Public Relations Review*, *47*(1), 102003. https://doi.org/10.1016/j.pubrev.2020.102003

Ecker-Ehrhardt, M. (2018). Self-legitimation in the face of politicization: Why international organizations centralized public communication. *The Review of International Organizations*, *13*(4), 519–546. https://doi.org/10.1007/s11558-017-9287-y

Ecker-Ehrhardt, M. (2020). IO Public Communication Going Digital? Understanding Social Media Adoption and Use in Times of Politicization. In *Digital Diplomacy and International Organisations*. Routledge.

Eveland, W. P., Jr., Cortese, J., Park, H., & Dunwoody, S. (2004). How Web Site Organization Influences Free Recall, Factual Knowledge, and Knowledge Structure Density. *Human Communication Research*, *30*(2), 208–233. https://doi.org/10.1111/j.1468-2958.2004.tb00731.x

Hibbing, A. N., & Rankin-Erickson, J. L. (2003). A Picture Is Worth a Thousand Words: Using Visual Images to Improve Comprehension for Middle School Struggling Readers. *The Reading Teacher*, *56*(8), 758–770.

Hooghe, L., Marks, G., Lenz, T., Bezuijen, J., Ceka, B., & Derderyan, S. (2017). *Measuring International Authority: A Postfunctionalist Theory of Governance, Volume III*. Oxford University Press.

Hüller, T. (2007). Assessing EU strategies for publicity. *Journal of European Public Policy*, *14*(4), 563–581. https://doi.org/10.1080/13501760701314391

Lang, A., Park, B., Sanders-Jackson, A. N., Wilson, B. D., & Wang, Z. (2007). Cognition and Emotion in TV Message Processing: How Valence, Arousing Content, Structural Complexity, and Information Density Affect the Availability of Cognitive Resources. *Media Psychology*, *10*(3), 317–338. https://doi.org/10.1080/15213260701532880

Martins, A. I., Lecheler, S., & vreese, C. H. D. (2012). Information Flow and Communication Deficit: Perceptions of Brussels-Based Correspondents and EU Officials. *Journal of European Integration*, *34*(4), 305–322. https://doi.org/10.1080/07036337.2011.584345

Meijers, M., & Rauh, C. (2016). Has Eurosceptic Mobilization Become More Contagious? Comparing the 2009 and 2014 EP Election Campaigns in The Netherlands and France. *Politics and Governance*, *4*(1), 83–103. https://doi.org/10.17645/pag.v4i1.455

Meyer, C. (1999). Political Legitimacy and the Invisibility of Politics: Exploring the European Union’s Communication Deficit. *JCMS: Journal of Common Market Studies*, *37*(4), 617–639. https://doi.org/10.1111/1468-5965.00199

Rauh, C. (2021). *From the Berlaymont to the citizen? The language of European Commission press releases 1985-2020*. 25.

Rauh, C., Bes, B. J., & Schoonvelde, M. (2019). Undermining, defusing or defending European integration? Assessing public communication of European executives in times of EU politicisation. *European Journal of Political Research*. Scopus. https://doi.org/10.1111/1475-6765.12350

Schimmelfennig, F. (2020). Politicisation management in the European Union. *Journal of European Public Policy*, *27*(3), 342–361. https://doi.org/10.1080/13501763.2020.1712458

Silva, T., Kartalis, Y., & Lobo, M. C. (2021). Highlighting supranational institutions? An automated analysis of EU politicisation (2002–2017). *West European Politics*, *0*(0), 1–25. https://doi.org/10.1080/01402382.2021.1910778

Spirling, A. (2015). Democratization and Linguistic Complexity: The Effect of Franchise Extension on Parliamentary Discourse, 1832–1915. *The Journal of Politics*, *78*(1), 120–136. https://doi.org/10.1086/683612

Statham, P. (2008). Making Europe news: How journalists view their role and media performance. *Journalism*, *9*(4), 398–422. https://doi.org/10.1177/1464884908091292

Statham, P. (2010). Making Europe News. In R. Koopmans & P. Statham (Eds.), *The Making of a European Public Sphere* (pp. 125–150). Cambridge University Press. https://doi.org/10.1017/CBO9780511761010.009

Tang, Y., & Hew, K. F. (2018). Emoticon, Emoji, and Sticker Use in Computer-Mediated Communications: Understanding Its Communicative Function, Impact, User Behavior, and Motive. In L. Deng, W. W. K. Ma, & C. W. R. Fong (Eds.), *New Media for Educational Change* (pp. 191–201). Springer. https://doi.org/10.1007/978-981-10-8896-4\_16

Tolochko, P., Song, H., & Boomgaarden, H. (2019). “That Looks Hard!”: Effects of Objective and Perceived Textual Complexity on Factual and Structural Political Knowledge. *Political Communication*, *36*(4), 609–628. https://doi.org/10.1080/10584609.2019.1631919

Young, L., & Soroka, S. (2012). Affective News: The Automated Coding of Sentiment in Political Texts. *Political Communication*, *29*(2), 205–231. https://doi.org/10.1080/10584609.2012.671234

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3. We refer to the individuals and institutions by supranational actors. [↑](#footnote-ref-3)