Position Statement Smart Technologies, Empowering Citizens (STEC) Ben Schouten and Gwen Klerks, Eindhoven University of Technology

STEC is a four-year research program, ending this year, which focused on design to empower citizens so that they can act on topics, like climate change or diversity, that matter to them. We study what design requirements are needed in tools, platforms, and methods to support citizen empowerment and how to implement those interventions. Throughout the research project we collaborate with eight corporate, grassroot and research partners. The main outcomes of STEC are:

- Empowerment is considered a process by which individuals, collectives, and institutions develop mastery to collectively act upon matters important to their lives (Drydyck, 2013; Rapport, 1984; Zimmerman 2000). In our research we focused on the role of communities in collaboration with the designer, from a bottom-up perspective (see e.g., Klerks et al., 2020; Cazacu et al., 2020). Empowerment in the community context is best understood as a process unfolding over time and at various levels, rather than as an end state. To help designers and researchers understand, navigate and design for citizen empowerment, we developed the STEC mode (see figure 1).
- To design for citizen empowerment, we introduced eight competencies, that not only focus on infrastructures and the engagement with institutions (Huybrechts, 2017), but also on so called soft skills like community building and motivational aspects. These competencies could be seen as design guidelines.
- To enable sustainable community building, it is important to strengthen and collectively support
 the values and norms that the community wants to express. In our research by design, we focus
 on strengthening these collective visions, whereby external stakeholders are also invited. Based
 on this vision, collective action becomes more effective.
- We are currently adopting and developing what Waal et al. (2020) call dramaturgies: "the design of local settings and stories and the orchestration of events by which collective action is organized in time and place". Dramaturgies draw attention to how designers could (and should) focus on nurturing tacit and social aspects that underly community organization as an important part of the empowerment process, which, in our understanding, is paramount for the success of the design intervention.
- We propose designers as supporters of this process through hybrid design interventions, such as
 platforms or urban games (Schouten2017;2022) but also workshops, place making and other
 gatherings. Design does not stop at the technology, should be integrated, and related to the
 acting community (Ehn, 2008; Taylor et al. 2013; Norman and Stappers, 2015).



Figure 1: STEC model and the eight competencies

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Further Reading: www.stec.design, www.gamesforcities.com, w