

Conceptualising performance in public services co-production: from ideas to measures in neighbourhood watch schemes

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Abstract

Purpose – This paper delves into a pivotal juncture within the co-production literature, intersecting with the ongoing debate about performance challenges in public sector accounting scholarship. It explores how public managers conceive and measure the performance of co-produced public services.

Design/methodology/approach – A case study is conducted on three instances of neighbourhood watching – that is, a type of collective co-production – in a homogeneous institutional setting. The analysis and interpretation of empirical data are guided by a systematic conceptual space delineating the qualities that performance criteria can take in contexts where public services are produced.

Findings – Findings reveal that when the co-production activation is driven by both state and lay actors, public managers tend to conceptualise and measure its performance in a way that contributes to building a more structured co-productive space, where the roles to play, how to interact and what to achieve are clearly defined.

Originality/value – This paper breaks new ground by scrutinising the conceptualisation of performance in settings where public services involve actors beyond traditional public administrations. By exploring the diverse “shapes” and meanings that performance can take in co-production arrangements, this paper enriches discussions on how public sector accounting can inform co-production literature.

Keywords Co-production, Performance, Performance measurement, Neighbourhood watch, Italian municipalities

Paper type Research paper

1. Background to the study

Two intertwined topics give the background of this study. First, public sector organisations operate in an increasingly complex context, characterised by fiscal and democratic crises and recurrent natural, health and political emergencies (Bracci *et al.*, 2015; Grossi and Vakulenko, 2022). Public administrations have been resorting to untraditional arrangements for providing



public services in an attempt to cope with such context and integrate multiple institutional expectations. Concretely, this phenomenon resulted in the active engagement of actors from the economic and civil society for the provision of public services in forms such as public-private partnerships (Hodge and Greve, 2018; Peda and Vinnari, 2022), state-owned enterprises (Tonurist and Karo, 2016; Vakkuri and Johanson, 2018) and public services co-production (Cepiku *et al.*, 2020; Ruggiero *et al.*, 2021).

Second, performance is claimed to be the “*ultimate challenge*” for public service managers (Arnaboldi *et al.*, 2015, p. 17). Although there is a concern for providing more and better services with fewer resources, public managers have to deal with the “*sheer complexity*” (Arnaboldi *et al.*, 2015, p. 17) of reducing the object of their management to measure. Providing public services through untraditional arrangements complicates the management of those services and puts a further strain on the performance measurement dilemmas (Döhler, 2020; Steccolini, 2019). In those arrangements, performance measurement unfolds at the interface of an ambiguous multiplicity of actors from the public and private sectors, striving to balance between potentially conflicting expectations and goals (De Waele *et al.*, 2021; Morinière and Georgescu, 2022; Sorrentino *et al.*, 2023; Yetano and Sorrentino, 2023). This phenomenon raises conceptual questions that go beyond – but encompass – the measurement issue. The conceptual question is first to define the idea of the “good result” one expects from such arrangements and then understand how that idea is operationalised and measured (Adcock and Collier, 2001; Andersen *et al.*, 2016).

Those two intertwined streams of literature have focused on untraditional arrangements such as state-owned enterprises (Chiwamit *et al.*, 2017; Giosi and Caiffa, 2020), public-private partnerships (Stafford and Stapleton, 2022), and networks (Herranz Jr, 2010; Sargiacomo and Walker, 2022), while scant attention has been paid to the performance puzzle for those arrangements that escape from (inter) organisational boundaries – such as public services co-production (Cepiku *et al.*, 2020; Sicilia *et al.*, 2019; Steccolini, 2019; Grossi *et al.*, 2023). Co-production relies on the active and voluntary involvement of citizens in the production of public services (Branden and Honingh, 2016; Nabatchi *et al.*, 2017).

Consistently with the conceptualisation process introduced above (Adcock and Collier, 2001; Andersen *et al.*, 2016), we strive to deliver a contribution at the intersection of those streams of literature by addressing the following research questions:

RQ1. How do public managers conceive the co-production performance?

RQ2. What performance measures do public managers develop in co-production arrangements?

We conduct a case study on three instances of neighbourhood watch (NW) schemes in a homogenous institutional setting, that is, Italian municipalities, where the NW represents a typical example of the co-production of security service (Van Eijk, 2018). Andersen *et al.* (2016) propose an analytical and systematic conceptual space that allows disentangling the complexity of performance conceptualisation in public sector organisations. That conceptual space is used in this paper as a “lighthouse” for navigating the empirical world of how public managers conceive and measure co-production performance. Results from the case study show that, depending on how the co-production is activated, the co-production performance is conceptualised and measured in a way that creates different operative spaces for co-producers, where the roles, activities and expected contributions of state and lay actors are differently understood.

The paper is structured around seven sections. The following section reviews the literature on public services co-production, highlighting gaps at the intersection with public sector accounting research. Section 3 presents the conceptual space. Section 4 describes the research design. Section 5 presents and analyses the case study. Sections 6 and 7, respectively, discuss the case study and provides concluding remarks.

2. The accounting turn in the co-production literature

The “co-” paradigm has received unprecedented policy and scholarly attention in the last two decades and is normatively considered an answer to both wicked problems (Bianchi *et al.*, 2017) and fiscal and democratic crises (Voorberg *et al.*, 2015). The notion of co-production encompasses a wide range of activities implemented at any stage of the process through which public services are produced and which consist of an interaction between regular public service producers – actors who provide services on behalf of public administrations (i.e. *state actors*) – and individual citizens or groups of them who voluntarily participate as co-producers of services (i.e. *lay actors*) (Brandsen and Honingh, 2016). As such, co-commissioning, co-planning, co-delivery, and co-assessment are all types of co-production. Types of co-production have been conceptualised stemming from the different roles played by lay actors and the benefits delivered by co-production (Bovaird and Loeffler, 2013; Nabatchi *et al.*, 2017). Individual and group co-production entail the involvement of – respectively – single and groups of lay actors in the provision of a service for which they are direct recipients (Clark, 2015; Sicilia *et al.*, 2016), while collective co-production refers to the active involvement of different lay actors to produce services that generate benefits for the whole community, possibly including lay actors too (Ruggiero *et al.*, 2021).

Co-production has been extensively studied in the public administration and management literature (Voorberg *et al.*, 2015; Osborne *et al.*, 2021), where it has been understood as an instrument of collaborative governance (Bovaird and Loeffler, 2016; Poocharoen and Ting, 2015; Vignieri, 2020) and most efforts have been made to unveil its drivers and impacts (Cepiku *et al.*, 2020). A typical problem emphasised by such literature is that co-producers often struggle to figure out what they are supposed to do in the co-production and for what purposes. Co-production relies on a relationship between actors who are likely to have different values, positions in the socio-economic context, and backgrounds that all together lead to different interpretations of the service to co-produce (Mulvale and Robert, 2021; Frieling *et al.*, 2014; Owens and Cribb, 2012). In this regard, clear rules (Brandsen and Helderma, 2012), planning (Frieling *et al.*, 2014), and management control systems and tools (Sicilia *et al.*, 2019; Ruggiero *et al.*, 2021) seem to help both lay and state actors to understand their role in and the relevance of, the co-production.

The accounting research has been more silent on public services co-production, even though essential contributions can come from the understanding of both the functionalist and constructivist roles of accounting in/for/along the co-production process (Steccolini, 2019; Grossi *et al.*, 2023). For the co-production problem here stressed, performance measures are accounting inscriptions that operationalise ideas of the “expected good result” and, at the same time, create the virtual space within which actors understand the processes they are involved in (Mouritsen and Hansen, 2006; Talbot, 2010). The celebratory nature of co-production may explain why less attention has been paid to the performance topic so far (Grossi *et al.*, 2023). The co-production activation has often been presented as a panacea to fiscal and democratic crises, on the (optimist and normative) assumption that lay actors’ involvement ensures better public services (Dudau *et al.*, 2019). However, acknowledging the celebratory nature of co-production does not undermine the relevance of performance speculations but rather challenges the generally accepted conceptualisations of performance. Performance may have peculiar meanings in co-production, from which related measures should derive. Exploring how public managers – as key state actors – understand and measure co-production performance would help debating the indicators that catch their peculiar idea of co-production performance and, at the same time, reveal insights into their relationship with the co-production phenomenon.

3. A systematic conceptual space for analysing co-production performance

Performance conceptualisation can be described as a process through which a specific performance concept is formulated, operationalised, and finally measured through indicators (Adcock and Collier, 2001). Conceptualising performance in arrangements where public services are produced is a challenging endeavour. It raises epistemological concerns about the feasibility of comprehensively understanding all aspects of performance (Talbot, 2010), given the inherent complexity of public action – which aims to address multiple individual and collective needs simultaneously (Andrews *et al.*, 2006; Arnaboldi *et al.*, 2015).

Andersen *et al.* (2016) propose that such complexity can be unravelled by delineating and organising the differences among performance criteria to clarify what aspects are considered in performance assessments. They define a performance criterion as a “*theoretically defined standard based on achievements that can be evaluated*” (Andersen *et al.*, 2016, p. 853) and display a conceptual space composed of six *distinctions*, where distinctions refer to “*various qualities or characteristics of criteria corresponding to how these criteria are judged to be similar or different*” (Andersen *et al.*, 2016, p. 353). Examples of performance criteria are found in the checklist by Boyne (2002), which outlines five performance criteria (i.e. namely output, efficiency, service outcomes, responsiveness, and democratic outcomes) along with related sub-criteria. In essence, a specific performance idea may encompass one or more criteria, with differences/similarities among them being systematically organised through six distinctions. Operationalisation and measurement are integral parts of the conceptualisation process and should reflect the criteria included in the performance idea.

In the remainder of this section, we utilise the framework outlined by Andersen *et al.* (2016) and integrate it with the co-production literature to build normative expectations regarding how public managers – as state actors – conceptualise co-production performance. We elaborate on the qualities that the criteria (along with related indicators) should possess (refer to Table 1). To build such expectations, we assume that the more the interaction among co-producers is enabled, the better the co-production works (Tuurnas, 2015; Sicilia *et al.*, 2019), regardless of the specific objectives that actors aims to achieve through it.

Stakeholders is the first and significant distinction of the framework, questioning who decides what “good performance” is. This distinction suggests the importance of delineating stakeholders’ expectations regarding good performance and identifying who among them possesses the authority to deem a particular criterion indicative of a good result. In the

Distinction	Question	Examples/expectations in co-production
1. Stakeholder	Who decides what “good” performance is?	● State actors ● Lay actors ● Community
2. Formality	To what degree is performance formally or informally defined?	Written objectives vs. implicit expectations
3. Type of process focus	What type of process focus does the criterion have, if any?	● Transparency ● Representativeness
4. Type of product focus	What type of process focus does the criterion have, if any?	● Input ● Output ● Outcome
5. Unit of analysis	Who performs and on what level?	● Service ● Program
6. Subjectivity	To what degree does performance concern interior perceptions versus exterior phenomena?	User satisfaction

Source(s): Authors’ adaptation from Andersen *et al.* (2016), p. 858

Table 1.
“An analytical
framework on
performance and
co-production”

pluralistic and complex institutional context wherein public production processes unfold, diverse stakeholders (such as citizens, service users, private companies, groups of professionals, politicians, public administrators, and managers) typically harbour distinct perspectives on what represents a good result (Bingham *et al.*, 2005). Given that both state and lay actors' values should significantly influence the definition of co-production objectives (Williams *et al.*, 2016), we expect that the performance criteria associated with those objectives and the related indicators are likely to embed the performance perspective of lay and state actors alike. Such an embedment would facilitate the goal appropriation from both co-producers and foster a shared understanding of how to pursue them. Moreover, in co-production arrangements – particularly in collective co-production – it would be noteworthy to differentiate citizens who voluntarily participate in the co-production (i.e. lay actors) from the broader community (Bovaird and Loeffler, 2013; Nabatchi *et al.*, 2017). Taking community expectations into account in this regard would support co-producers to comprehend the relevance of co-production and its impacts.

The second distinction questions the degree of *formality* – contrasting with informality – in defining performance criteria. Higher degrees of formality are associated with performance objectives and indicators that are written, predetermined, and explicitly outlined through legislative provisions or official documents. In co-production arrangements, formally defining performance could facilitate lay actors in clearly and explicitly identifying their roles (Mulvale and Robert, 2021), while assisting state actors in comprehending how to engage with lay actors (Frieling *et al.*, 2014). Simultaneously, frequent and informal exchange of information not only ensures flexibility but also mitigates the distance in values and potential misunderstandings regarding objectives among state and lay actors (Owens and Cribb, 2012). Therefore, we expect that the co-production performance criteria and related indicators may display varying degrees of (in)formality functional to the management of the relationship between state and lay actors.

The third distinction, *inherent subjectivity*, questions the degree to which a performance criterion focuses on either an interior experience or the observation of an external phenomenon (Andrews *et al.*, 2006). It is important to note that a subjective performance criterion should not be mistaken for a biased measurement. For example, the perception of service users can provide reliable evidence into how they experience a service, provided that the data collection and analysis are conducted rigorously (Talbot, 2010). Our expectation about this distinction stems from the fundamental rationale behind co-production, that is, the involvement of co-producers, especially citizens, in the production of public services (Cluley *et al.*, 2021). Consequently, we expect that co-production performance criteria and related indicators should be inherently subjective to capture the lay actors' experience with the service co-production.

The fourth distinction – *the type of process focus* – acknowledges that performance in contexts where public services are produced does not solely concern the product of a but also concerns the process itself (Moynihan, 2009; Van Ryzin, 2011). Thus, performance criteria focused on the involvement of stakeholders in the decision-making process, equity, and fairness of production processes may hold relevance. The co-production literature highlights that transparency and representativeness of lay actors is crucial to create value for the community, especially in collective co-production (Cepiku *et al.*, 2016; Vanleene *et al.*, 2020). Therefore, our expectation in this regard is that co-production performance criteria and related measures should also focus on processual aspects.

The *type of product focus*, the fifth distinction, questions which element of the production process a performance criterion focuses on. The distinctions outlined in the IOO model (input-output-outcome) are useful for categorising performance criteria based on their product focus. In co-production arrangements, a focus on inputs and outputs – rather than outcomes – may disproportionately emphasise resources used, and products realised by either state or

lay actors (Sicilia *et al.*, 2016), thus overlooking the interaction occurring throughout the co-production process and its impact on state/lay actors and the community. Additionally, quantifying co-production inputs and outputs, or calculating ratios based on them, necessitates a level of familiarity with monitoring tools and methods that is often lacking in co-production arrangements (Tuurnas, 2015; Sicilia *et al.*, 2019; Cepiku *et al.*, 2020). Focussing on outcomes, instead, would enable greater flexibility to manage the relationship between state and lay actors (Farr, 2016) and directs attention towards achieving collective objectives (Frieling *et al.*, 2014). Cepiku *et al.* (2020) categorise co-production outcomes according to the affected actors, distinguishing between outcomes related to state actors (e.g. cost efficiency, service effectiveness, impacts on workforce productivity, uncertainty, and trust), those related to lay actors (e.g. satisfaction, awareness, learning, cost, and possible externalities), and those pertaining the community (e.g. social capital, equity, legitimacy, socio-economic impact). Therefore, we expect that outcome performance criteria should be prioritised for assessing co-production performance, resulting in measures capable of catching these focuses.

Lastly, the *unit of analysis* distinction questions the domain of activity being assessed and the level of analysis. This distinction regards the identity of the unit whose results are analysed. Similar to the stakeholders' distinction, the unit of analysis also looks at subjects, although who decides what is to be assessed are separate from the subjects whose achievements are being assessed. In this regard, the individual level can be distinguished from the organisational and public programs. Bettencourt *et al.* (2002) caution that lay actors may perceive the monitoring of their results as intrusive, potentially discouraging their involvement in co-production. Therefore, we expect that co-production performance criteria should focus on the service and program levels, where the activities of both state and lay actors can nevertheless be encompassed.

Various performance criteria are adopted in co-production, and their qualities may more or less align to our expectations. The case study will investigate whether, how, and why our expectations about their qualities are empirically validated.

4. The research design

4.1 Method

We use the case study as a suitable research method for verifying our expectations on how performance conceptualisation unfolds in co-production and to generate further potential questions for future studies (Flyvbjerg, 2006). Acknowledging the co-production as our case, we draw upon rich observations from a small sample of instances to make an accurate and analytical investigation (Lukka and Modell, 2010; Stake, 2010).

To select the instances of co-production, we stepped through the following process. Firstly, we decided to conduct the empirical research within a homogeneous institutional setting, opting for the Italian one. This setting allows us to study the instances in their natural contexts and gain adequate access to research material. Furthermore, Italy's relevance to the co-production phenomenon is notable, given the significant macro-drivers such as fiscal and democratic crises that have severely affected the country in recent decades (Cepiku *et al.*, 2016). Secondly, we focused on the local level of government due to its proximity to citizens and the consequential importance of the interaction between state and lay actors in public service provision (Bovaird and Loeffler, 2013). Thirdly, we considered instances of collective co-production occurring in the delivery stage of the public production process as they exemplify the essence of public action (Nabatchi *et al.*, 2017). Fourthly, we identified Neighbourhood Watch (NW) schemes as typical examples of collective co-production, where community policing services are delivered through active partnerships between state and lay actors (van Eijk, 2018; Van Eijk *et al.*, 2017; Williams *et al.*, 2016). These NW schemes entrust

residents with the responsibility to monitor their territory, enhancing safety objectives through the identification of structural, environmental, and behavioural vulnerabilities and the implementation of targeted prevention measures to reduce crime opportunities (Cohen and Felson, 1979).

National and local governments have often promoted the NW as a means to revitalise social bonds and regain trustworthiness and legitimacy from the community (Basham, 2020; van Steden, 2011). While the responsibility for intervening and apprehending potential perpetrators remains with the Local Police (LP), residents contribute by increasing awareness to create a natural deterrent against crime. The NW originated in the United States in the 1970s and spread to Europe in subsequent decades. In Italy, it was first experienced in the late 2000s and has since gained popularity, particularly in Northern regions, while being less common in Southern municipalities.

Following a process akin to theoretical sampling (Parker and Northcott, 2016), we gradually selected instances to maximise the utility of information from a small sample by considering expected variations (Eisenhardt, 1989). Initially, we selected one instance (M1) that met all outlined criteria and began studying it in mid-2020. Preliminary findings from M1, along with engagement with co-production and performance literature, guided the selection of two additional instances (M2 and M3), allowing for comparison of commonalities and differences. Specifically, recognising that performance conceptualisation is influenced by how state and lay actors perceive and prioritise co-production (Mouritsen and Hansen, 2006; Talbot, 2010), we focused on the type of co-production activation as a theoretical dimension linked to the interaction between state and lay actors, which could explain varying approaches to performance conceptualisation. Co-production activation can be driven by either lay actors or state actors, reflecting state actors' willingness to share power and responsibilities and the propensity for service innovation (Sicilia *et al.*, 2016; Voorberg *et al.*, 2015).

Consequently, we study co-production through three Italian NW scheme instances developed at the municipality level (i.e. M1, M2, and M3), each activated by different actors. The selection of instances was supported by a municipal manager and the founder of the Italian Association of NW. Additionally, we conducted preliminary interviews and gathered documentary data on other Italian NW instances. However, these additional instances did not yield significant insights beyond those already obtained, leading to their exclusion from the research.

4.2 Data gathering and analysis

We collected data through semi-structured interviews with key actors and written materials produced by the municipalities (see Appendix 1 and Appendix 2). We conducted a total of 29 interviews between April 2020 and March 2023, with interviews concluding upon reaching data saturation. The selection of interviewees varied depending on the organisational peculiarities of the three instances, with a focus on involving LP Department managers as primary state actors. Additionally, lay actors were interviewed to triangulate data on co-production arrangements and activities related to performance measurement, where applicable. Interviews were conducted using an interview protocol aligned with Andersen *et al.*'s (2016) conceptual framework, with interviewees encouraged to provide further insights. Secondary sources included informational documents on the NW schemes prepared by actors, as well as publicly disclosed strategic and performance plans of the municipalities since the NW activation in each instance.

We performed three rounds of manual coding on documents and interview transcripts, aiming to extract data pertaining to (1) NW practicalities, (2) the idea of NW good performance, and (3) performance criteria and related measures. Data on NW practicalities

contributed to the contextual understanding of the three instances. Interpretation of the collected data was guided by the conceptual frameworks of [Boyne \(2002\)](#) and [Andersen et al. \(2016\)](#), focussing respectively on performance criteria and their attributes. While two authors conducted the coding process, a third author participated in interviews and the interpretation of results, with comprehensive discussions held among the entire research team.

5. The case study: sites and performance conceptualisation

5.1 The empirical sites and their practicalities

In this subsection, we provide detailed information about the empirical sites of our case study and describe the practicalities of the NW in each instance. [Table 2](#) outlines the three instances according to the theoretical dimension and offers additional context description. Despite their variations, as elaborated below in this section, all three instances follow a typical NW scheme arrangement. Municipalities introduced the NW through a Memorandum of Understanding signed with the Prefecture. Accordingly, residents gather up into identifiable groups within specific areas of the municipal territory and voluntarily participate in co-producing the security service by increasing vigilance towards unusual events and identifying “environmental risk factors” (such as poor lighting). Neighbours’ groups establish communication channels for quick information exchange (e.g. via telephone chains or instant messaging apps group chats) and foster collaborative relationships through mutual assistance. In case of emergencies requiring immediate Police intervention, neighbours promptly notify the emergency numbers. The primary public organisation unit involved in the NW is the LP Department, whose state actors engage with residents through activities ranging from regular neighbourhood patrols to systematic service coordination.

M1, a municipality that recently underwent a political shift from centre-left to centre-right orientation. Within the LP Department, led by the LP manager and consisting of six officers, there exists a strong acceptance of citizen participation in the NW. The activation of the NW at M1 dates to 2014, driven by collaborative efforts between state and lay actors in response to rising concerns about safety within the municipality. Residents expressed growing alarm over increased incidents of burglary, prompting calls for enhanced crime prevention measures. Concurrently, the Municipal Councillor responsible for security policies recognised the potential of the NW in addressing these safety challenges and engaged in dialogue with residents to explore its viability as a solution. Presently, M1 boasts over 20 active NW groups, varying in size (from a minimum of 8 to a maximum of 160 residents) and reflective of distinct territorial districts, mainly situated in suburban areas. Formalisation of these groups occurs through the signing of agreements. Until a recent change in the city council’s political composition in 2022, the NW enjoyed considerable prominence as a policing service. LP Department staff viewed citizen involvement as beneficial, and lay actors felt to bring a valuable resource to the policing services, that is their knowledge of the territory. To pursue NW objectives, each group appoints a coordinator, officially designated by the municipality, to serve as a liaison with the LP Department. Coordinators facilitate communication between

		M1	M2	M3
Theoretical dimension	<i>Type of activation</i>	Co-producers-driven	Lay actors-driven	State actors-driven
contextual description	<i>Location</i>	Central Italy	Northern Italy	Northern Italy
	<i>Inhabitants</i>	89,100 (~)	20,000 (~)	76,300 (~)
	<i>NW activation</i>	2014	2009	2015

Source(s): Authors’ elaboration

Table 2.
“The empirical sites: an
outline of key
theoretical and
descriptive
dimensions”

groups and law enforcement, reporting incidents based on agreed criteria and disseminating relevant information to neighbourhoods. LP Department officers conduct regular patrols in NW areas, not only as part of routine surveillance but also to foster relationships with participating residents. All LP officers, regardless of educational background, underwent comprehensive training in community policing projects.

M2, characterised by a centre-left political orientation, operates with an LP Department led by the LP manager and consisting of eight officers. It represents the pioneering Italian experience of NW, initiated in 2009 under the impetus of lay actors. The activation of NW in M2 is credited to a resident, later a co-founder of the Italian NW Association, who championed the program following a personal experience of burglary. Despite that, the citizen involvement and the perceived importance of NW remain limited from the municipality side, as elaborated below. At the time of writing, M2 hosts three neighbourhood groups involving 120 families collectively. The main activities of the LP Department consist of promoting the NW, scheduling recurring public meetings to train neighbours on the identification and prevention of social and environmental vulnerabilities and placing NW signage alongside roads. LP involvement primarily centres on the LP manager, who lacks specialised training in NW initiatives. The NW scheme at M2 has a peculiar governance arrangement that involves a further actor, namely the National NW Association. Acting as a mediator between neighbourhood groups and the LP Department, the Association assumes a role akin to that of coordinators in M1. It facilitates communication, particularly through digital platforms, filtering and forwarding relevant messages and requests to the LP Department. Neighbours are responsible for other NW activities, such as the activation of the groups, requests for public meetings as necessary, and maintaining vigilance within their neighbourhoods.

M3, governed by a centre-left political stance, operates with an LP Department led by the LP manager and comprising 65 officers. The activation of the NW initiative occurred in 2015, with official launch the following year. The impetus for NW activation at M3 stemmed from the LP Department's need to address the overwhelming volume of resident intervention requests, exceeding the capacity of traditional policing activities. Presently, M3's NW program encompasses 15 groups, comprising approximately 1,115 residents. Compared to M2 but still trailing behind M1, M3 exhibits a more pronounced NW significance for state actors and citizen involvement acceptance, attributable in part to the municipality's longstanding tradition of neighbourhood policies since the 1990s. The oversight of NW activities is carefully monitored by the Councillor delegated with security policies, who staunchly endorse the project as a significant political objective. Within the LP Department, the LP manager and seven LP officers are dedicated to NW efforts, though none have received specialised training in this area. State actors assume a central role in initiating and facilitating NW activities, including the registration of data about residents involved in the NW, neighbourhood group coordination, and establishment of communication channels such as instant messaging chats with neighbours.

5.2 The NW performance at the empirical sites

Considering the context and practicalities of the NW outlined earlier, this section proceeds to examine how NW performance is conceptualised across M1, M2, and M3. To facilitate the subsequent discussion, Table 3 provides a preview of our analysis, summarising its key points for easier reference throughout this sub-section.

5.2.1 M1. At M1, the NW "good performance" at M1 is centred around the creation of trust relationships both among lay actors and between state and lay actors. As the LP manager puts it, the NW aims to "*stimulate them [the citizens] to network because, for the environmental risks to be counteracted, cohesion must be leveraged*". Even though (s)he assumes that the NW

Instances of co-production	M1	M2	M3
Activation	co-producers driven	lay actors-driven	state actors-driven
Performance idea	Trust-building relationships	Safety perception	Urban safety
Performance criteria	Participation	Quantity	Efficiency
Distinctions	State actors	State actors	State actors
<i>Stakeholder Formality</i>	Written <i>ex ante</i> and ex-post objectives, indicators, and targets	Written <i>ex ante</i> and ex-post objectives, indicators, and targets	Written ex-post indicators
<i>Type of process focus</i>	Interaction among state and lay actors	(none)	(none)
<i>Type of product focus</i>	(none)	(none)	(none)
<i>Unit of analysis</i>	output	output	output
<i>Inherent subjectivity</i>	Co-producers at the service level	Co-producers at the service level	State actors at the service level
Indicators	Objective	Objective	Objective
	● No. of weekly meetings in the neighbourhoods ● No. of LP accounts on social networks ● No. of followers of LP accounts on social networks	● Response rate to the questionnaire ● Degree of lay actors' satisfaction with the NW	● No. of calls from the neighbourhoods ● Average time of LP intervention per call
Source(s): Authors' elaboration			

Table 3.
Summary of results

helps preserve the neighbourhood's safety, the socialising aspect of this service is so relevant that (s)he would implement it regardless of the actual impact on crime rate.

The LP manager's idea of good NW performance comprises three criteria: participation (as a sub-criterion of the democratic outcomes), quantity (as a sub-criterion of output), and lay actors' satisfaction (as a sub-criterion of responsiveness (Boyne, 2002)).

Participation focuses on the interaction both among lay actors and between them and the LP Department staff. In terms of the stakeholders distinction, this criterion reflects the state actors' expectations that, for the NW to work, lay actors must be involved. Hence, the most relevant quality of this criterion regards its focus on a processual aspect of co-production, that is the interaction among state and lay actors, representing an objective phenomenon to assess. In terms of the unit of analysis, this criterion focuses on the performance of both co-producers at the service level, given its emphasis on activities necessarily carried out by both state and lay actors for the intrinsic provision of the NW.

Quantity, the second criterion, relies on the assumption that the good NW performance can be assessed in terms of its quantitative diffusion in the municipal territory. Hence, it inherently focuses on the output of the NW production process, which is objectively observable. Like the former, this criterion also embeds the perspective of good performance of state actors exclusively, being the LP manager and officers those claiming the relevance of evaluating this achievement. In terms of the unit and level of the performance assessment, this criterion also focuses on activities carried out by both co-producers at the service level. The quantitative diffusion of the NW relies on the state actors' promotion of it, lay actors' manifested willingness to be involved in it, and eventually, on the signing of agreements among them.

Lay actors' satisfaction is the third criterion adopted at M1. This criterion shows three different qualities as compared to the others there. First, it embeds the lay actors' perspective of good performance, besides the state actors' one. This quality is due not merely to its intrinsic meaning but also to how it is assessed. To prepare the questionnaire through which the lay actors' overall satisfaction is assessed, the LP officers have relied mainly on hints from group coordinators about what they considered relevant evaluating in terms of NW good results. Second, this criterion inherently looks at the interior experience of lay actors rather than at some external phenomena. Thirdly, while it does not have any focus on the co-production process, it looks at early outcomes of it. Like the former two criteria, however, lay actors' satisfaction focuses on the activities carried out by both co-producers at the service level.

These criteria are not only implicitly assumed but also formalised since 2018, indicating the NW's saliency for state actors. Such formalisation occurred by including specific objectives, indicators, and targets referred to the NW in the performance plans and reports that the municipality mandatorily prepares on an annual basis. The performance indicators developed by M1 have changed four times over the time analysed. In 2018, they related mainly to the participation and quantity criteria, measuring the number of weekly meetings between co-producers and the number of new NW groups. In 2020, indicators were related to the responsiveness criterion, measuring the lay actors' overall satisfaction with the NW through a questionnaire, as well as the response rate to this latter. Finally, while no performance measures of the municipality's plan refer to the NW in 2021, they are reintroduced in 2022 and focus on participation again, this time looking at the interactions between state and lay actors through social media. Indeed, performance indicators measure the expansion of the LP Department's accounts on social media and the number of their followers.

5.2.2 M2. At M2, the conceptualisation of NW performance is predominantly informal and relatively underdeveloped. Despite the NW being included in the M2 Strategic Plans as part of the policing service, the LP manager struggles to clearly define the idea of NW performance, its constituent criteria, and possible indicators for measurement. The LP manager articulated this challenge during the interview, stating: *"What could the NW objective be? It is difficult to understand what you need to measure. I mean, 'creating ... a*

greater safety perception'? However, everything is related to neighbours' calls and our interventions", emphasising a focus on citizens' perceived safety. The LP manager no longer perceives territorial vulnerabilities to be addressed by the NW, considering it primarily to maintain a safety perception compared to its initial launch.

Implicitly, a criterion relating to quantity (as a sub-criterion of output – Boyne, 2002) emerges from the LP manager's statements, indicating a focus on the volume of basic activities within the NW to define what (s)he would expect to be a proper NW achievement. Therefore, two are the main qualities of such criterion. First, it is representative of the state actors' perspective. Second, this criterion is inherently focused on the outputs of the co-production process, given its emphasis on the quantity of some primary results from it. Because of the former, the unit of analysis and subjectivity distinctions follow. Quantity is here meant as a criterion related to the NW service level, where both co-producers and lay actors carry out the activities whose results are to be assessed. Moreover, it concerns an objective phenomenon.

The challenge of translating a broad idea of NW performance into specific criteria and measures is compounded by the absence of written performance objectives and indicators at M2. Despite references to the NW in the M2 Strategic Plans and the agreement with the Prefecture mandating the collection and reporting of NW activities, adapting these general provisions to the specific NW arrangement proves challenging for the LP manager. Consequently, data collection about the NW relies on informal and unstructured feedback obtained during public meetings or informal assessments among LP staff. State actors primarily focus on the results of basic NW activities, such as the number of neighbourhood calls and LP staff interventions in NW-covered areas, during these informal assessments.

5.2.3 M3. At M3, the idea of NW "good performance" revolves around the notion of heightened safety within the urban territory. According to the LP manager, "[citizens'] participation is the activity, not the goal [. . .] It is a type of [territorial] control that enhances urban safety."

This idea of NW performance translates into an efficiency criterion (Boyne, 2002). This criterion embeds the perspective of good performance of state actors only, who deem it crucial to evaluate the service's performance akin to other policing services they provide. This criterion drives state actors' attention towards the output of the policing service, which is one resulting from activities of their typical responsibility. Thus, the domain of activities here assessed refers to those objectively carried out by state actors at the NW level, encompassing the routine duties performed by LP Department staff.

The identification of NW performance criteria and the development of indicators are not only implicitly assumed by the LP manager but also formalised at M3. The peculiarity here is that such formalisation does not occur through mandated annual publications but rather in voluntary documents prepared by the LP Department each year to purposefully report on the outcomes of community policing projects – referred to as Zone Documents. Although the NW is mentioned in the municipality's strategic and performance plans, these documents lack specific performance objectives or measures for the NW. Instead, the Zone Documents highlight results from NW activities separately, assessing its overall performance as a standalone service. The indicators developed to measure the NW performance are closely related to the efficiency criterion, such as the Average time of LP intervention per neighbours' call. Notably, the LP Department convenes a meeting with neighbourhood groups every January to present the latest Zone Documents.

6. A comparative discussion on coproduction performance conceptualisation at M1, M2, and M3

In our case study, we examined three distinct instances where the co-production activation was driven by lay actors (M2), by state actors (M3), and jointly by both co-producers (M1).

These variations reflect the differing levels of importance each co-producer assigns to the co-productive process, consequently impacting how LP managers conceptualise and measure its performance. Specifically, the performance criteria utilised by LP managers to assess co-production performance across the three instances exhibit varying characteristics, as discussed in this section.

Regarding the first distinction of our conceptual framework (*stakeholders*), LP managers in all analysed instances primarily adopt performance criteria that embed the perspective of state actors regarding co-production performance. In M1, however, among the criteria adopted, the satisfaction of lay actors incorporates their perspective on good performance alongside that of state actors. This criterion not only focuses inherently on the experience and expectations of lay actors regarding co-production but also involves their engagement in determining what aspects are relevant to assess. In line with our expectations, M1 stands out as the only instance where LP managers adopt a performance criterion likely to promote a shared understanding with lay actors regarding objectives and desired outcomes of the NW co-production (Williams *et al.*, 2016). These findings appear consistent with the high level of acceptance of lay actors' involvement in the NW at M1. Recognising the significance of considering the expectations of lay actors, who play a crucial role in co-production, LP managers strive to align their efforts with the objectives sought through and within the NW. Notably, across the instances analysed, LP managers do not adopt any performance criterion reflecting community expectations, despite the NW representing a common form of collective co-production (van Eijk, 2018; Van Eijk *et al.*, 2017; Williams *et al.*, 2016) likely to impact the community. Even in M1, where the satisfaction of lay actors' criterion is present, it serves as a specific instantiation of citizen satisfaction criteria conceptualised by Boyne (2002), albeit focussing solely on lay actors within the community (Bovaird and Loeffler, 2013; Nabatchi *et al.*, 2017). Consequently, the performance assessment fails to account for the broader expectations of the community regarding the service. Thus, the evaluation of co-production performance persists irrespective of the contribution of lay actors to its definition, with the co-production space predominantly shaped by the interpretation of state actors, albeit acknowledging the presence of lay actors within that space.

Considering the second distinction – *formality* – findings from the case study indicate that LP managers at M1 and M3 formalise the definition of performance criteria and indicators, whereas these aspects are only implicitly assumed at M2. However, the formalisation process at M1 and M3 exhibits notable distinctions. On one hand, LP managers at M1 formalise objectives, indicators, and targets in official planning (*ex ante*) and reporting (*ex-post*) documents pertaining to the entire municipality. On the other hand, the formalisation of co-production performance at M3 is confined to the reporting of *ex-post* indicators in documents prepared voluntarily by the LP Department. The heightened organisational and political commitment observed at M1 (notably, M1 stands out as the sole instance where the LP Department staff has received specialised training for the NW) may account for these peculiarities. Contrary to our expectations in this regard (Mulvale and Robert, 2021), such formalisation fails to assist lay actors in discerning their role in the co-production process. As articulated by the interviewed lay actors, they are unaware of any formalised NW objectives or measures documented in the municipality's official records. Consequently, the formalisation of co-production performance at M1 may serve legitimacy objectives (Deegan, 2006; Monfardini *et al.*, 2013), indicating its dedication to stakeholders beyond lay actors. Additionally, formally defined objectives and targets can serve as incentives for public officers (Mussari and Ruggiero, 2010; Demircioglu, 2021), rewarding LP staff for their dedication to untraditional policing services deemed strategically significant for the organisation. Consequently, the formalised quality of co-production performance criteria at M1 aims to fulfil certain needs of state actors, such as signalling organisational commitment to an innovative service that duly acknowledges

citizens' contributions (Papadopoulos and Warrin, 2007) and delineating the scope of responsibilities for LP staff (Frieling *et al.*, 2014). In line with our expectations (Owens and Cribb, 2012), informal exchanges of information between state and lay actors at M1 facilitate discussions and comprehension of NW objectives and activities by lay actors.

As for M3, the formalisation carried out through documents voluntarily prepared by the LP Department, confines the "ownership" of the NW to the LP Department itself, indicating that the Department attributes greater strategic significance to the NW than the organisation. Consequently, the formal definition of the performance criterion and indicators at M3 likely aids state actors in understanding their role in delivering an untraditional policing service they perceive as essential. However, the focus solely on state actors' activities through the efficiency criterion and related indicators at M3 does not entirely align with our expectations (Mulvale and Robert, 2021; Frieling *et al.*, 2014). By emphasising only the domain of activities of state actors, the written ex-post indicators at M3 clarify for both co-producers what state actors are supposed to do. In contrast, the role of lay actors in co-production remains largely unclear.

We can interpret the findings from M2 using arguments like those applied in analysing instances M1 and M3. At M2, not only is there a lower perception of the NW's importance, but there is also a distinct NW governance arrangement where the National NW Association supplants the municipality in managing the NW. These factors justify the LP manager's limited commitment to conceptualising and measuring NW performance. The absence of formalisation at M2 thus allows state actors to maintain a "labile" relationship with lay actors, where labile implies vagueness rather than flexibility.

Examining the *type of process focus*, only at M1 does the LP manager adopt a performance criterion – the participation criterion – which inherently emphasises a processual aspect of co-production. Here, the interaction between state and lay actors is viewed as a goal in itself rather than merely a means to an end in the provision of the studied public service (Moynihan, 2009; Van Ryzin, 2011). This finding aligns with our expectation that co-production performance criteria should prioritise process-focused elements (Cepiku *et al.*, 2016; Vanleene *et al.*, 2020). The results from M1 support our expectation that co-production performance can be more comprehensively conceptualised and measured by incorporating criteria and indicators that address both products and processes. In contrast, at M2 and M3, the adopted performance criteria exclusively concentrate on outputs. Specifically, the quantity and efficiency criteria employed there focus on the output of policing services, primarily stemming from activities conducted by state actors. Consequently, the findings from the M2 and M3 instances validate another expectation outlined earlier, suggesting that performance criteria and measures centered on outputs are likely to tilt towards results achieved predominantly by one of the co-producers – in this case, state actors (Sicilia *et al.*, 2019).

This observation is tied to the *unit of analysis* distinction evident in both criteria at M2 and M3, which primarily focus on state actors at the service level. In contrast, M1 stands out by adopting performance criteria not only focused on process (participation) or output (quantity) but also on outcomes, specifically addressing lay actors' satisfaction as a form of outcome affecting lay actors (Cepiku *et al.*, 2020). It is noteworthy that in none of the instances is there a calculation of inputs, such as the time expended by LP staff or the costs incurred, for the NW implementation, underscoring the absence of more sophisticated managerial tools and methods in co-production (Tuurnas, 2015; Sicilia *et al.*, 2019; Cepiku *et al.*, 2020).

Lastly, regarding the *subjectivity* distinction, our expectation in this respect is once again confirmed only at M1, where the criterion of lay actors' satisfaction inherently encourages a focus on lay actors' subjective experiences with the NW, thereby giving them a voice in the co-production process (Cluley *et al.*, 2021).

In summary, the analysis of findings from the case study highlights that greater political and organisational commitment, along with the perceived importance of the NW and

acceptance of lay actors' involvement, prompt LP managers to adopt co-production performance criteria that supports in establishing a co-production environment where the roles, expectations, and contributions of both state and lay actors are defined, and their interaction is emphasised. Conversely, at M2, the lesser significance of the NW, reduced political and organisational commitment to this co-produced service, and the presence of a dominant third actor in NW governance explain why the LP manager does not prioritise defining and measuring NW performance. These circumstances lead to an ambiguous co-production environment where the roles and relationships between state and lay actors remain unclear. Essentially, state actors at M2 passively accept the activation of the NW by lay actors in a ceremonial manner. Lastly, at M3, the NW is initiated by state actors and serves as a service aligned with typical policing objectives. While the NW holds importance for the LP Department, the significance of lay actors' contributions is limited. Consequently, the adoption of NW performance criteria and indicators at M3 contributes to creating a space dominated by state actors, leaving the role of lay actors undefined.

7. Conclusion

Co-production, an untraditional approach to delivering public services, has garnered significant attention in the literature on public administration and management (Voorberg *et al.*, 2015; Osborne *et al.*, 2021). Despite their relatively modest contributions thus far, scholars in public sector accounting can greatly enhance our understanding of this phenomenon by exploring the role of accounting within, for, and alongside the co-production process (Steccolini, 2019; Grossi *et al.*, 2023). This paper sought to stimulate such discussion by addressing a prominent issue highlighted in the co-production literature: the challenge faced by both state and lay actors in defining their roles, interactions, and objectives. Specifically, we investigated how public managers – significant state actors – conceptualise and measure co-production performance, aiming to elucidate how this understanding aids both state and lay actors in clarifying their roles and expected contributions to co-production initiatives. In doing so, we also examine how public managers navigate the complex performance dilemmas inherent in arrangements where public services involve actors beyond the public administration (Herranz Jr, 2010; Chiwamit *et al.*, 2017; Giosi and Caiffa, 2020; Sargiacomo and Walker, 2022; Stafford and Stapleton, 2022).

The case study conducted at three instances of collective co-production allows us to derive conclusions of both theoretical and practical significance. The primary theoretical finding suggests that the level of acceptance of lay actors' involvement in the co-production and the importance that state actors give to the co-produced service affects how the co-production performance is conceptualised and measured. These are tightly linked to how co-production is activated. State actors tend to adopt varying performance criteria and associated indicators based on whether co-production is activated by state or lay actors. Specifically, when both state and lay actors drive the co-production activation, state actors are more likely to adopt performance criteria and indicators that foster a structured co-productive environment with defined roles, interactions, and results to achieve. As a corollary, when only one party drives the co-production activation, state actors predominantly shape the co-production space, leaving the role of lay actors ambiguous.

Building upon this, the main practical implication is that public managers consider deeper the qualities of co-production performance they intend to assess. To do so, they should acknowledge that incorporating criteria reflecting the perspectives of lay actors and emphasising processual aspects, such as state-lay actor interactions, can enhance outcome assessment beyond quantitative outputs. Co-production is viewed as a potential remedy for the legitimacy crises in public administrations. Consequently, it is also crucial to explore how co-production generates public value and how accounting for this value contributes to

defining what co-producers should do and for what purposes. Lastly, our research highlights that, to facilitate interaction between state and lay actors, public managers should focus on formalising co-production performance through specific documents tailored for each co-production initiative. Utilising such documents enables the use of accessible language for lay actors, enhancing communication within co-production and with the broader community.

We encourage colleagues to address the study's limitations, such as its focus on a particular type of collective co-production (the NW) and its dependence on political-administrative contexts. Future research could explore different types of co-production and examine their performance conceptualisation in diverse institutional settings. Furthermore, adopting an interdisciplinary approach could deepen understanding by integrating lay actors' decision-making processes into the conceptualisation of co-production performance.

References

- Adcock, R. and Collier, D. (2001), "Measurement validity: a shared standard for qualitative and quantitative research", *American Political Science Review*, Vol. 95 No. 3, pp. 529-546, doi: [10.1017/s0003055401003100](https://doi.org/10.1017/s0003055401003100).
- Andersen, L.B., Boesen, A. and Pedersen, L.H. (2016), "Performance in public organizations: clarifying the conceptual space", *Public Administration Review*, Vol. 76 No. 6, pp. 852-862, doi: [10.1111/puar.12578](https://doi.org/10.1111/puar.12578).
- Andrews, R., Boyne, G.A. and Walker, R.M. (2006), "Subjective and objective measures of organisational performance", in Meier, K.J. and Boyne, G.A. (Eds), *Public Service Performance: Perspectives on Measurement and Management*, Cambridge University Press, Cambridge, pp. 14-34.
- Arnaboldi, M., Lapsley, I. and Steccolini, I. (2015), "Performance management in the public sector: the ultimate challenge", *Financial Accountability and Management*, Vol. 31 No. 1, pp. 1-22, doi: [10.1111/faam.12049](https://doi.org/10.1111/faam.12049).
- Basham, S.L. (2020), "Campus law enforcement: the relationship between emergency preparedness and community policing", *Policing: An International Journal*, Vol. 43 No. 5, pp. 741-753, doi: [10.1108/pijpsm-01-2020-0010](https://doi.org/10.1108/pijpsm-01-2020-0010).
- Bettencourt, L.A., Ostrom, A.L., Brown, S.W. and Roundtree, R.I. (2002), "Client co-production in knowledge-intensive business services", *California Management Review*, Vol. 44 No. 4, pp. 100-128, doi: [10.2307/41166145](https://doi.org/10.2307/41166145).
- Bianchi, C., Bovaird, T. and Loeffler, E. (2017), "Applying a dynamic performance management framework to wicked issues: how co-production helps to transform young people's services in Surrey County Council, UK", *International Journal of Public Administration*, Vol. 40 No. 10, pp. 833-846, doi: [10.1080/01900692.2017.1280822](https://doi.org/10.1080/01900692.2017.1280822).
- Bingham, L.B., Nabatchi, T. and O'Leary, R. (2005), "The new governance: practices and processes for stakeholder and citizen participation in the work of government", *Public Administration Review*, Vol. 65 No. 5, pp. 547-558, doi: [10.1111/j.1540-6210.2005.00482.x](https://doi.org/10.1111/j.1540-6210.2005.00482.x).
- Bovaird, T. and Loeffler, E. (2013), "We're all in this together: harnessing user and community co-production of public outcomes", Institute of Local Government Studies: University of Birmingham, Vol. 1, pp. 1-13.
- Bovaird, T. and Loeffler, E. (2016), "What has co-production ever done for interactive governance", in *Critical Reflections on Interactive Governance: Self-Organization and Participation in Public Governance*, p. 254.
- Boyne, G.A. (2002), "Theme: local government: concepts and indicators of local authority performance: an evaluation of the statutory frameworks in England and Wales", *Public Money and Management*, Vol. 22 No. 2, pp. 17-24, doi: [10.1111/1467-9302.00303](https://doi.org/10.1111/1467-9302.00303).
- Bracci, E., Humphrey, C., Moll, J. and Steccolini, I. (2015), "Public sector accounting, accountability and austerity: more than balancing the books?", *Accounting, Auditing and Accountability Journal*, Vol. 28 No. 6, pp. 878-908, doi: [10.1108/aaaj-06-2015-2090](https://doi.org/10.1108/aaaj-06-2015-2090).

- Brandsen, T. and Helderman, J.-K. (2012), "The trade-off between capital and community: the conditions for successful co-production in housing", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 23 No. 4, pp. 1139-1155, doi: [10.1007/s11266-012-9310-0](https://doi.org/10.1007/s11266-012-9310-0).
- Brandsen, T. and Honingh, M. (2016), "Distinguishing different types of Co-production: a conceptual analysis based on the classical definitions", *Public Administration Review*, Vol. 76 No. 3, pp. 427-435, doi: [10.1111/puar.12465](https://doi.org/10.1111/puar.12465).
- Cepiku, D., Mussari, R. and Giordano, F. (2016), "Local governments managing austerity: approaches, determinants and impact", *Public Administration*, Vol. 94 No. 1, pp. 223-243, doi: [10.1111/padm.12222](https://doi.org/10.1111/padm.12222).
- Cepiku, D., Marsilio, M., Sicilia, M. and Vainieri, M. (2020), *The Co-production of Public Services*, Springer Books, Palgrave Macmillan, Cham.
- Chiwamit, P., Modell, S. and Scapens, R.W. (2017), "Regulation and adaptation of management accounting innovations: the case of economic value added in Thai state-owned enterprises", *Management Accounting Research*, Vol. 37, pp. 30-48, doi: [10.1016/j.mar.2017.03.001](https://doi.org/10.1016/j.mar.2017.03.001).
- Clark, M. (2015), "Co-production in mental health care", *Mental Health Review Journal*, Vol. 20 No. 4, pp. 213-219, doi: [10.1108/mhrj-10-2015-0030](https://doi.org/10.1108/mhrj-10-2015-0030).
- Cluley, V., Gale, N. and Radnor, Z. (2021), "Using situated interviews to engage frail older people in the co-production of improved emergency healthcare", *International Journal of Public Administration*, Vol. 44 No. 9, pp. 767-777, doi: [10.1080/01900692.2021.1912088](https://doi.org/10.1080/01900692.2021.1912088).
- Cohen, L.E. and Felson, M. (1979), "On estimating the social costs of national economic policy: a critical examination of the Brenner study", *Social Indicators Research*, Vol. 6 No. 2, pp. 251-259, doi: [10.1007/bf00343977](https://doi.org/10.1007/bf00343977).
- De Waele, L., Polzer, T., Van Witteloostuijn, A. and Berghman, L. (2021), "A little bit of everything? Conceptualising performance measurement in hybrid public sector organisations through a literature review", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 33 No. 3, pp. 343-363, doi: [10.1108/jpbafm-05-2020-0075](https://doi.org/10.1108/jpbafm-05-2020-0075).
- Deegan, C. (2006), "Legitimacy theory", in Hoque, Z. (Ed.), *Methodological Issues in Accounting Research: Theories, Methods and Issues*, Spiramus Press, London, pp. 161-181.
- Demircioglu, M.A. (2021), "Sources of innovation, autonomy, and employee job satisfaction in public organisations", *Public Performance and Management Review*, Vol. 44 No. 1, pp. 155-186, doi: [10.1080/15309576.2020.1820350](https://doi.org/10.1080/15309576.2020.1820350).
- Döhler, M. (2020), "The architecture of organizations as missed opportunity in political research", *Public Administration*, Vol. 98 No. 4, pp. 891-904.
- Dudau, A., Glennon, R. and Verschuere, B. (2019), "Following the yellow brick road? (Dis)enchantment with co-design, co-production and value co-creation in public services", *Public Management Review*, Vol. 21 No. 11, pp. 1577-1594, doi: [10.1080/14719037.2019.1653604](https://doi.org/10.1080/14719037.2019.1653604).
- Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy Of Management Review*, Vol. 14 No. 4, pp. 532-550, doi: [10.2307/258557](https://doi.org/10.2307/258557).
- Farr, M. (2016), "Co-production and value Co-creation in outcome-based contracting in public services", *Public Management Review*, Vol. 18 No. 5, pp. 654-672, doi: [10.1080/14719037.2015.1111661](https://doi.org/10.1080/14719037.2015.1111661).
- Flyvbjerg, B. (2006), "Five misunderstandings about case-study research", *Qualitative Inquiry*, Vol. 12 No. 2, pp. 219-245, doi: [10.1177/1077800405284363](https://doi.org/10.1177/1077800405284363).
- Frieling, M.A., Lindenberg, S.M. and Stokman, F.N. (2014), "Collaborative communities through co-production: two case studies", *American Review of Public Administration*, Vol. 44 No. 1, pp. 35-58, doi: [10.1177/0275074012456897](https://doi.org/10.1177/0275074012456897).
- Giosi, A. and Caiffa, M. (2020), "Political connections, media impact and state-owned enterprises: an empirical analysis on corporate financial performance", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 33 No. 3, pp. 261-288, doi: [10.1108/jpbafm-12-2019-0188](https://doi.org/10.1108/jpbafm-12-2019-0188).

- Grossi, G. and Vakulenko, V. (2022), "New development: accounting for human-made disasters—comparative analysis of the support to Ukraine in times of war", *Public Money and Management*, Vol. 42 No. 6, pp. 467-471, doi: [10.1080/09540962.2022.2061694](https://doi.org/10.1080/09540962.2022.2061694).
- Grossi, G., Steccolini, I., Adhikari, P., Brown, J., Christensen, M., Cordery, C., Ferry, L., Lassou, P., McDonald III, B., Raudla, R., Sicilia, M. and Vinnari, E. (2023), "The future of public sector accounting research. A polyphonic debate", *Qualitative Research in Accounting and Management*, Vol. 20 No. 1, pp. 1-37, doi: [10.1108/qram-09-2022-0135](https://doi.org/10.1108/qram-09-2022-0135).
- Herranz, J., J. (2010), "Network performance and coordination: a theoretical review and framework", *Public Performance and Management Review*, Vol. 33 No. 3, pp. 311-341, doi: [10.2753/pmr1530-9576330301](https://doi.org/10.2753/pmr1530-9576330301).
- Hodge, G. and Greve, C. (2018), "Contemporary public-private partnership: towards a global research agenda", *Financial Accountability and Management*, Vol. 34 No. 1, pp. 3-16, doi: [10.1111/faam.12132](https://doi.org/10.1111/faam.12132).
- Lukka, K. and Modell, S. (2010), "Validation in interpretive management accounting research", *Accounting, Organisations and Society*, Vol. 35 No. 4, pp. 462-477, doi: [10.1016/j.aos.2009.10.004](https://doi.org/10.1016/j.aos.2009.10.004).
- Monfardini, P., Barretta, A.D. and Ruggiero, P. (2013), "Seeking legitimacy: social reporting in the healthcare sector", *Accounting Forum*, Vol. 37 No. 1, pp. 54-66, doi: [10.1016/j.accfor.2012.11.001](https://doi.org/10.1016/j.accfor.2012.11.001).
- Morinière, A. and Georgescu, I. (2022), "Hybridity and the use of performance measurement: facilitating compromises or creating moral struggles? Insights from healthcare organisations", *Accounting, Auditing and Accountability Journal*, Vol. 35 No. 3, pp. 801-829, doi: [10.1108/aaaj-12-2019-4309](https://doi.org/10.1108/aaaj-12-2019-4309).
- Mouritsen, J. and Hansen, A. (2006), "Operations, and network relations: debating the lateral dimension", in Bhimani, A. (Ed.), *Contemporary Issues in Management Accounting*, Oxford University Press, Oxford, pp. 266-290.
- Moynihan, D.P. (2009), "Through a glass, darkly. Understanding the effects of performance regimes", *Public Performance and Management Review*, Vol. 32 No. 4, pp. 592-603, doi: [10.2753/pmr1530-9576320409](https://doi.org/10.2753/pmr1530-9576320409).
- Mulvale, G. and Robert, G. (2021), "Engaging vulnerable populations in the Co-production of public services", *International Journal of Public Administration*, Vol. 44 No. 9, pp. 711-714, doi: [10.1080/01900692.2021.1921941](https://doi.org/10.1080/01900692.2021.1921941).
- Mussari, R. and Ruggiero, P. (2010), "Public managers' performance evaluation systems and public value creation: behavioral and economic aspects", *International Journal of Public Administration*, Vol. 33 No. 11, pp. 541-548, doi: [10.1080/01900692.2010.507115](https://doi.org/10.1080/01900692.2010.507115).
- Nabatchi, T., Sancino, A. and Sicilia, M. (2017), "Varieties of participation in public services: the who, when, and what of Co-production", *Public Administration Review*, Vol. 77 No. 5, pp. 766-776, doi: [10.1111/puar.12765](https://doi.org/10.1111/puar.12765).
- Osborne, S.P., Nasi, G. and Powell, M. (2021), "Beyond co-production: value creation and public services", *Public Administration*, Vol. 99 No. 4, pp. 641-657, doi: [10.1111/padm.12718](https://doi.org/10.1111/padm.12718).
- Owens, J. and Cribb, A. (2012), "Conflict in medical co-production: can a stratified conception of health help?", *Health Care Analysis*, Vol. 20 No. 3, pp. 268-280, doi: [10.1007/s10728-011-0186-8](https://doi.org/10.1007/s10728-011-0186-8).
- Papadopoulos, Y. and Warin, P. (2007), "Are innovative, participatory and deliberative procedures in policy-making democratic and effective?", *European Journal of Political Research*, Vol. 46 No. 4, pp. 445-472, doi: [10.1111/j.1475-6765.2007.00696.x](https://doi.org/10.1111/j.1475-6765.2007.00696.x).
- Parker, L.D. and Northcott, D. (2016), "Qualitative generalising in accounting research: concepts and strategies", *Accounting, Auditing and Accountability Journal*, Vol. 29 No. 6, pp. 1100-1131, doi: [10.1108/aaaj-04-2015-2026](https://doi.org/10.1108/aaaj-04-2015-2026).
- Peda, P. and Vinnari, E. (2022), "To build or not to build? Mobilisation of uncertainty arguments in public decision-making on private megaprojects", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 34 No. 6, pp. 235-262, doi: [10.1108/jpbafm-05-2022-0089](https://doi.org/10.1108/jpbafm-05-2022-0089).
- Poocharoen, O.O. and Ting, B. (2015), "Collaboration, co-production, networks: convergence of theories", *Public Management Review*, Vol. 17 No. 4, pp. 587-614, doi: [10.1080/14719037.2013.866479](https://doi.org/10.1080/14719037.2013.866479).

- Ruggiero, P., Sorrentino, D. and Mussari, R. (2021), "Performance measurement and management in Co-production. An explorative analysis", in Hoque, Z. (Ed.), *Public Sector Reform and Performance Management in Developed Economics. Outcome-Based Approaches in Practice*, Routledge, New York, pp. 219-247.
- Sargiacomo, M. and Walker, S.P. (2022), "Disaster governance and hybrid organisations: accounting, performance challenges and evacuee housing", *Accounting, Auditing and Accountability Journal*, Vol. 35 No. 3, pp. 887-916, doi: [10.1108/aaaj-12-2019-4323](https://doi.org/10.1108/aaaj-12-2019-4323).
- Sicilia, M., Guarini, E., Sancino, A., Andreani, M. and Ruffini, R. (2016), "Public services management and co-production in multi-level governance settings", *International Review of Administrative Sciences*, Vol. 82 No. 1, pp. 8-27, doi: [10.1177/0020852314566008](https://doi.org/10.1177/0020852314566008).
- Sicilia, M., Sancino, A., Nabatchi, T. and Guarini, E. (2019), "Facilitating co-production in public services: management implications from a systematic literature review", *Public Money and Management*, Vol. 39 No. 4, pp. 233-240, doi: [10.1080/09540962.2019.1592904](https://doi.org/10.1080/09540962.2019.1592904).
- Sorrentino, D., Ruggiero, P. and Mussari, R. (2023), "Agents and logics in community policing: the designing of performance measures", *Public Management Review*, Vol. 25 No. 9, pp. 1640-1663, doi: [10.1080/14719037.2023.2230989](https://doi.org/10.1080/14719037.2023.2230989).
- Stafford, A. and Stapleton, P. (2022), "The impact of hybridity on PPP governance and related accountability mechanisms: the case of UK education PPPs", *Accounting, Auditing and Accountability Journal*, Vol. 35 No. 3, pp. 950-980, doi: [10.1108/aaaj-12-2019-4324](https://doi.org/10.1108/aaaj-12-2019-4324).
- Stake, R.E. (2010), *Qualitative Research: Studying How Things Work*, The Guilford Press, New York.
- Steccolini, I. (2019), "Accounting and the post-new public management: Re-considering publicness in accounting research", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 1, pp. 255-279, doi: [10.1108/aaaj-03-2018-3423](https://doi.org/10.1108/aaaj-03-2018-3423).
- Talbot, C. (2010), *Theories of Performance. Organisational and Service Improvement in the Public Domain*, Oxford University Press, Oxford.
- Tonurist, P. and Karo, E. (2016), "State-owned enterprises as instruments of innovation policy", *Annals of Public and Cooperative Economics*, Vol. 87 No. 4, pp. 623-648, doi: [10.1111/apce.12126](https://doi.org/10.1111/apce.12126).
- Tuurnas, S. (2015), "Learning to co-produce? The perspective of public service professionals", *International Journal of Public Sector Management*, Vol. 28 No. 7, pp. 583-598, doi: [10.1108/ijpsm-04-2015-0073](https://doi.org/10.1108/ijpsm-04-2015-0073).
- Vakkuri, J. and Johanson, J.E. (2018), "Taming the monster—towards an understanding of hybrid organisations and governance", *Public Money and Management*, Vol. 38 No. 3, pp. 162-163, doi: [10.1080/09540962.2018.1434306](https://doi.org/10.1080/09540962.2018.1434306).
- Van Eijk, C. (2018), "Helping Dutch neighborhood watch schemes to survive the rainy season: studying mutual perceptions on citizens' and professionals' engagement in the Co-production of community safety", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 29 No. 1, pp. 222-236, doi: [10.1007/s11266-017-9918-1](https://doi.org/10.1007/s11266-017-9918-1).
- Van Eijk, C., Steen, T. and Verschuere, B. (2017), "Co-producing safety in the local community: a Q-methodology study on the incentives of Belgian and Dutch members of neighbourhood watch schemes", *Local Government Studies*, Vol. 43 No. 3, pp. 323-343, doi: [10.1080/03003930.2017.1281803](https://doi.org/10.1080/03003930.2017.1281803).
- Van Ryzin, G.G. (2011), "Outcomes, process, and trust of civil servants", *Journal of Public Administration Research and Theory*, Vol. 21 No. 4, pp. 745-760, doi: [10.1093/jopart/muq092](https://doi.org/10.1093/jopart/muq092).
- van Steden, R., van Caem, B. and Boutellier, H. (2011), "The 'hidden strength' of active citizenship: the involvement of local residents in public safety projects", *Criminology and Criminal Justice*, Vol. 11 No. 5, pp. 433-450, doi: [10.1177/1748895811414467](https://doi.org/10.1177/1748895811414467).
- Vanleene, D., Voets, J. and Verschuere, B. (2020), "The co-production of public value in community development: can street-level professionals make a difference?", *International Review of Administrative Sciences*, Vol. 86 No. 3, pp. 582-598, doi: [10.1177/0020852318804040](https://doi.org/10.1177/0020852318804040).

- Vignieri, V. (2020), "Leveraging collaborative governance: how co-production contributes to outcomes and public value in a small town", in Bianchi, C., Luna-Reyes, L.S. and Rich, E. (Eds), *Enabling Collaborative Governance through Systems Odelling Methods: Public Policy Design and Implementation*, pp. 47-71.
- Voorberg, W.H., Bekkers, V.J. and Tummers, L.G. (2015), "A systematic review of co-creation and co-production: embarking on the social innovation journey", *Public Management Review*, Vol. 17 No. 9, pp. 1333-1357, doi: [10.1080/14719037.2014.930505](https://doi.org/10.1080/14719037.2014.930505).
- Williams, B.N., LePere-Schloop, M., Silk, P.D. and Hebbon, A. (2016), "The co-production of campus safety and security: a case study at the University of Georgia", *International Review of Administrative Sciences*, Vol. 82 No. 1, pp. 110-130, doi: [10.1177/0020852315573157](https://doi.org/10.1177/0020852315573157).
- Yetano, A. and Sorrentino, D. (2023), "Accountability disclosure of SOEs: comparing hybrid and private European news agencies", *Meditari Accountancy Research*, Vol. 31 No. 2, pp. 294-319, doi: [10.1108/medar-04-2020-0873](https://doi.org/10.1108/medar-04-2020-0873).

Appendix 1

Title	Length (nr. of pages)	Topic
<i>M1</i>		
Performance Plan 2018	207	Performance measures for Y2018
Performance Plan 2019	302	Performance measures for Y2019
Performance Plan 2020	368	Performance measures for Y2020
Performance Plan 2021	326	Performance measures for Y2021
Performance Plan 2022	199	Performance measures for Y2022
Integrated Plan of activities and organisation (PIAO) 2022–2024	141	Integrated Plans and performance measures
Presentation of the NW at M1	60	Slide presentation prepared by the Municipality to present/promote the NW to citizens and other PAs
	TOT = 1,603	
<i>M2</i>		
NW project presentation	14	NW presentation and main guidelines
Single Programming Document 2022–2026	193	Official strategic plan document for performance objectives and measures
Memorandum of understanding	12	Agreement between the neighbours, Prefecture, and municipalities
	TOT = 219	
<i>M3</i>		
Programming Plan 2023–2025	524	Strategic and operational plan 2023–2025
Programming Plan 2022–2024	488	Strategic and operational plan 2022–2024
Programming Plan 2021–2023	511	Strategic and operational plan 2021–2023
Programming Plan 2020–2022	415	Strategic and operational plan 2020–2022
Programming Plan 2019–2021	503	Strategic and operational plan 2019–2021
Programming Plan 2018–2020	529	Strategic and operational plan 2018–2020
Programming Plan 2017–2019	466	Strategic and operational plan 2017–2019
Programming Plan 2016–2019	290	Strategic and operational plan 2016–2019
Zone Document	10	Monitoring and reporting of community policing activities
	TOT = 3,436	

Table A1.
Documents analysed

Appendix 2

M1			M2			M3		
Interviewee	Date	Length (mins)	Interviewee	Date	Length (mins)	Interviewee	Date	Length (mins)
Secretary	apr-20	10	Local Police manager	ott-22	90	Local Police manager	dic-22	95
Municipality Councillor	May 2020	13	Local Police manager	ott-22	40	Assessor	gen-23	55
Local Police Manager	May 2020	37	Mayor	nov-22	24	Community member 1	mag-23	33
Secretary	May 2020	27	Community member 1	gen-23	24	Community member 2	mag-23	43
Local Police Manager	June 2021	28	Community member 2	feb-23	25			
Community member 1	June 2021	26						
Community member 2	June 2021	24						
Community member 3	June 2021	30						
Community member 4	June 2021	12						
Community member 5	June 2021	17						
Community member 6	June 2021	11						
Local Police Manager	May 2022	40						
Local Police Officer	May 2022	52						
Community member 1	May 2022	25						
Community member 2	May 2022	42						
Community member 3	June 2022	12						
Community member 4	June 2022	16						

Table A2.
Interviews report

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