

Discrepancy between theory and practice: procurement of local and organic food in public catering systems

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Abstract

Spending approximately 19 % of the EU's gross domestic product, public authorities are major consumers in the EU Member States and their decisions have significant impact on the market. The procurement of local and organic food for public kitchens is considered an instrument that contributes to the regional economy and sustainable use of resources. Although the reform of public procurement law enables EU Member States to include environmental and social criteria in award processes, research results point out that public authorities do not yet use these legal possibilities.

For the purpose of identifying factors hampering local and organic food purchases in tendering procedures, this paper aims to point out the differences in theory and practice in public procurement processes. The analysis is based on case studies on school catering in Berlin and the Federal State of Brandenburg, which present two different models of procurement policies. The methodical approach consists of an analysis of tender documents and guided interviews with different stakeholders involved in public procurement processes.

Results show that the fulfilment of the potential to procure organic and local food services varies in the two different model regions. Supporting factors for the procurement of local and organic food are e.g. the determination of a fixed-price and standardised award criteria which caused a quality competition among caterers driving an increase of organic food in Berlin to 40%. Based on our results we make recommendations for public authorities that aim to close the gap between theory and practice in their organic procurement procedures.

1. Introduction

With increasing awareness of environmental and social sustainability there is increased public interest in the procurement of products which are in line with societal expectations of sustainable food production and consumption. Research results and local development strategies highlight the procurement of local and organic food products (LOF) as an instrument contributing to the improvement of both the regional economy and the sustainable use of natural resources. The benefits associated with procurement of LOF do not exclusively concern environmental issues like soil degradation, loss of biodiversity, energy and water consumption, waste generation and animal welfare (European Commission 2008). They can even include social, health and economic advantages. Public institutions have the potential to become pioneers creating markets for

sustainable products and services. Spending approximately 19 % of the EU's gross domestic product, public authorities are major consumers in the EU Member States and their decisions have significant impact on the market (European Commission 2015). They are able to provide incentives to the private sector to develop sustainable technologies and products (McKinsey&Company 2008). By using adequate criteria to procure LOF, they can promote small and medium-sized enterprises (SME) and regional value-based food chains (Risku-Norja und Løes 2016; Spigarolo et al. 2010b, Foodlinkscommunity 2013, 2013).

A number of directives and agreements such as the reform of European legislation on public procurement in 2004 or the European "Green Public Procurement" criteria enable EU Member States to include environmental and social criteria in award processes. Research results point out that the uptake of green and social criteria in tenders varies significantly across Member States, and also across regions and product groups within countries. While public authorities in e.g. Sweden, Denmark, Belgium and the Netherlands include green criteria in 40-60 % of their tender calls, the proportion of green criteria in procurement processes in Germany, France and the UK amounts only to 20-40 % (Renda et al. 2012). Criteria enabling the procurement of local and organic foods are not applied in 48 % of all award procedures (Renda et al. 2012). Current research findings relating to school catering in Germany indicate that organic food is requested in only 40 % of all tender procedures for school meals, whereas local food seems to be randomly integrated into most menus (Arens-Azevedo 2012; Arens-Azevedo et al. 2015). These research results based on surveys indicate that – despite changing public procurement law – public authorities do not yet use their potential to procure local and organic food. Explanations for this hesitant and partial implementation of sustainability criteria include lack of legal expertise and training, lack of procurement targets, insufficient political support and the higher costs of LOF (European Commission 2015; Beck und Schuster 2013; Schmidt und Dubbers 2014; McKinsey&Company 2008). Although the different studies describe the reasons for an insufficient implementation of sustainability criteria in public procurement processes, suitable approaches to overcome these barriers have still not been realised in practice. The results of these previous studies are mainly based on surveys of tendering authorities and they concern the procurement of different products and services.

2. Materials and methods

Our approach is to analyse tender documents in order to identify and assess the weak points preventing the procurement of LOF and to present opportunities to address these issues. Based on an analysis of tender calls and guided interviews, our paper points out the differences in theory and practice in public procurement processes. The focus is on school catering in Berlin and the Federal State of Brandenburg, which present two different models of procurement policies. After defining appropriate analysis criteria for the procurement of local and organic food, the analysis of tender documents for catering services in schools and day care institutions highlights the implementation of these criteria in procurement procedures. Our results of guided interviews with different stakeholders involved in public procurement processes point out new business opportunities for catering companies offering local and organic food. Finally, we discuss the lessons learned from the analysis of the two case study regions by considering the legal opportunities for LOF in public tenders. Based on these experiences, we develop practical recommendations for public authorities that aim to close the gap between theory and practice in procurement procedures.

In order to identify and assess drivers and constraints for LOF in procurement procedures, we used a combination of a document analysis and guided interviews. The survey concerning public procurement of school and kindergarten meals in Germany pursues the following objectives:

- to point out the current status of sustainability criteria in public procurement processes
- to assess current procurement policies with regard to supporting and inhibiting factors for local and organic foods in communal catering

2.1 Analysis of calls for tender

Calls for tender are the key instrument for municipalities to influence the quality of food and to put food policies into practice (Spigarolo et al. 2010a). Their specifications and award criteria provide the basis for the contracts between public institutions and catering companies and thus the percentage of LOF in public kitchens. The analysis of tender documents was the starting point for the analysis of the current status of sustainability criteria implementation and potential weaknesses in procurement processes.

2.2 Selection of case studies

The focus of our work was on award procedures for school and kindergarten catering in the neighbouring states Berlin and Brandenburg, published in the period of 2013-2015. Berlin and Brandenburg represent two models of different procurement policies. In Berlin, a political decision in 2013 led to a standardisation of award criteria in tender procedures for school catering. These regulations include a minimum percentage of 15 % of organic foods in school meals and a fixed price of 3,25 Euro per school meal (Senatsverwaltung für Bildung und Jugend und Wissenschaft 2013). Due to these unified standards for tender procedures in Berlin, the common template for the award processes was analysed instead of individual procurement processes.

In Brandenburg, the procurement law does not contain specific requirements for the procurement of school catering. To obtain tenders published by public institutions in Brandenburg, a national database for call for tenders helped to identify recently conducted award processes. We identified 19 tenders meeting the specified requirements. After contacting the responsible authorities, 9 of these 19 local authorities put their tender documents at disposal, so that we could analyse 9 award processes in Brandenburg

2.3 Definition of analysis criteria

Prior to the analysis of the tender documents, it was important to define appropriate assessment criteria. For this purpose, we used EU-regulations on public procurement (European Union 2004, 2014) and purchasing recommendations (European Commission 2008) as a common point of reference. Since EU-regulations determine the characteristics of organic food, the term “organic” was easy to apply for this specific group of products. In contrast, the application of the concept of “regionality” was challenging because the term “local food” does not refer to a legal framework. Although the EU principles of equal treatment and non-discrimination do not permit the municipal authorities to prefer local enterprises (European Union 2004, 2014), the procurement law does not prohibit to specify a percentage of local products. According to a legal expert, public authorities are allowed to procure local products, because each catering company has the opportunities to purchase from local suppliers (A. Theurer, personal communication, March 18, 2016). However, the definition of “local products” can constitute a difficulty. EU-guidelines for

green public procurement recommend hence the use of the term “seasonal products” instead of “local foods” (European Commission 2008, 2011).

This paper uses the following criteria for the assessment of local and organic food procurement:

- **Criteria 1: specification of a minimum proportion of local/seasonal and organic foods.** Public institutions are able to determine a minimum share of either a defined product group or a specific product to be used carrying out the service.
- **Criteria 2: additional points for local/seasonal and organic foods.** Public procurers sometimes use a scoring system. In these cases, offers based on LOF receive additional points in comparison to offers which only cover the minimum requirements.
- **Criteria 3: facilitation of access to public catering for small and medium-sized enterprises.** When public procurement lots represent significant volumes, only a small number of large-size, over-regional catering firms will be able to participate in the tender. Only smaller lots enable SMEs and new businesses to bid. Awarding offices have the opportunity to divide contracts into smaller lots. Moreover, they have the opportunity to define contract requirements in a way that even SMEs and new businesses will be able to comply (e.g. proof of references).
- **Criteria 4: innovative public procurement.** Public procurement law allows the support of innovation. It may be that public authorities are not easily able to determine technical specifications. In such cases there are no well-defined products or services available to meet the public sector need. (e.g. if), In such cases a “competitive dialogue” or “technical dialogue” within a procurement procedure can be conducted with potential bidders (European Union 2004, 2014).

2.4 Interviews

Based on the analysis results of tender documents, we conducted expert interviews. The objective was to evaluate, whether current procurement processes prevent or encourage LOF. The interviews took place in November 2015 with managers of local catering companies and an expert of the Berlin Networking Agency for School Catering¹.

The following key questions guided the interviews:

- (1) How much impact has there been from different policies? The fixed-price on quality properties of school meals in Berlin versus the price competition in Brandenburg?
- (2) How suitable are the current award criteria with regard to the procurement of LOF?
- (3) Which opportunities and constraints do SMEs experience when they aim to participate in tendering procedures?

3. Results

3.1 Status quo of sustainability criteria in tender processes in Berlin and Brandenburg

¹ the Berlin Networking Agency for School Catering (Vernetzungsstelle Schuilverpflegung) is a non-profit association which supports activities related to healthy school meals

In Berlin, the departments of education of the respective district offices are responsible for the procurement of school catering. The procurement volume of these award procedures comprises 100 000 meals per day. In Brandenburg, municipalities in charge for youth and education affairs carry out the tendering procedures. The 9 analysed tendering calls in Brandenburg included contracts for 240 up to 2 200 meals per day. Contract values amounted to between 500 000 Euro and 4 200 000 Euros.

We analysed the calls for tender based on the criteria defined in chapter 2. The most relevant results of the analysis concern the three following aspects: (1) Specification of a minimum share of local and organic foods as compulsory criteria, (2) Weighting of price and quality criteria and (3) the lot sizes.

3.2 Specification of a minimum percentage of local and organic foods as compulsory criteria

The first objective of the analysis was to identify the minimum percentage of LOF required in the selection criteria of the tender documents. Selection criteria determine the quality of the procured product or service. Bidders have to fulfill these criteria in order to be considered in the award process.

In **Berlin**, the calls for tender require a minimum percentage of 15 % of organic products. The specified percentage is related to the total amount of costs and do not refer to product groups. A minimum proportion of local products is not demanded. Nevertheless, the bidders have to meet the quality standard for school meals elaborated by the German Association for Nutrition (DGE). This quality standard recommends the use of seasonal products where possible.

The analysis of procurement procedures in **Brandenburg** highlighted that organic products are required in only one of nine tender documents. As in Berlin, the compliance of the German quality standard for school meals is recommended or – in some tender documents – required. Local products are not considered within the compulsory criteria.

3.3 Weighting of price and quality criteria

In order to assess the different bidders in a transparent manner, public authorities have to determine award criteria. By assigning a score to different aspects, such as e.g. price or percentage of organic products, the tendering authority is able to weigh price and quality criteria in order to obtain the most economically advantageous tender. The bidder who receives the highest score wins the contract.

By analysing the award criteria with regard to the weighting of price and quality criteria, we detected not only major differences between the case studies Berlin and Brandenburg, but also within the award procedures in Brandenburg (cf. table 1).

	Award criteria	Berlin	B1	B2	B3	B4	B5	B6	B7	B8	B9
1	Price		50%	40%	30%	60%	30%	50%	15%	50%	25%
2	Organic products	10%			15%			15%		10%	10%
3	Local products				15%		20%	15%	10%	20%	30%
4	Seasonal products		20%							20%	
5	Test meal	50%		50%			40%				50%
6	Time keeping food warm	15%	30%		20%			20%	15%		
7	Menu samples					40%			50%		
8	Amount of convenience food										30%
9	Implementation concept at school	25%									
10	Efficiency (staff, transport routes, energy consumption)			10%							
11	Ordering procedure				20%				10%		
12	Communication						10%				

Table 1: Award criteria in calls for tender in Berlin and Brandenburg (B1-B9)

In the analysed calls for tender, a large variety of award criteria was identified. We differentiated these heterogeneous parameters into five categories:

- 1) Price
- 2) Organic products
- 3) Local/seasonal products
- 4) Sensory/nutritional quality (test meal, time keeping food warm, menu samples, amount of convenience food)
- 5) Service quality (implementation concept at school, efficiency, ordering procedure, communication)

In order to show the weighting of award criteria in Berlin and Brandenburg, we calculated the average scores of the above defined categories.

In **Berlin**, the political decision to set fixed prices per school meal led to award processes in which different quality criteria decided the award of contract. In consequence, the quality criteria do not have to compete with a low price; 10 % of the total score is assigned for a percentage of organic products exceeding the minimum requirement defined in the specification (cf. Fig. 1); 65 % of the points are awarded for sensory and nutritional quality of the meals and 25 % for the service quality.

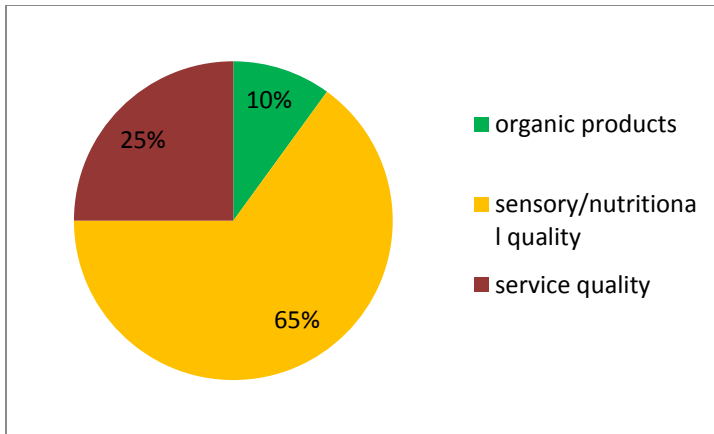


Figure 1: Weighting of award criteria in Berlin

The analysis of the calls for tender in **Brandenburg** shows that in comparison to quality aspects the price is a very important factor in the award procedures. With an average of 39 % of the total score, the price is given equal weight to sensory/nutritional quality (cf. Fig. 2). The analysis highlights that up to 60 % of the total score may be awarded to the lowest price provider (cf. Table 1).

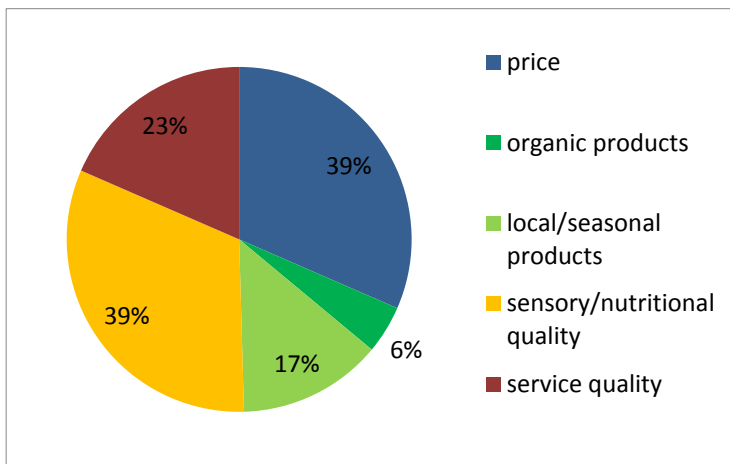


Figure 2: Weighting of award criteria in Brandenburg

On average only 6 % of the total score is awarded for a high percentage of organic products. Bidders receive on average 17 % of the points for a high proportion of local or seasonal products. The sensory/nutritional quality is assessed with 39 % and the service quality with 23 % of the total score. In the analysed calls for tenders we detected a variety of 11 different award criteria, which were used in different combinations and weightings (cf. Table 1). This inconsistency of award criteria and the impact on bidders will be discussed in the next chapter.

3.4 Lot sizes

A major objective of the reform of public procurement law is the facilitation of the access to public contracts for SMEs (European Union 2014; BMWI 2014, 2015). In particular, growing businesses or newcomers have significant problems to participate in public tenders. However, public institutions have the opportunity to organise tendering processes with realistic chances for new catering businesses (BMWI 2015). For this purpose, regulations on public procurement recommend the division of contracts into smaller lots (European Union 2014; BMWI 2015). Any exceptions to this principle require justification through the tendering authority.

According to these policy papers, large contract volumes and disproportionate requirements related to economic performance tend to be disadvantageous for SMEs (BMWI 2015; Deutscher Bundestag 2015). Despite these important legally based requirements on lot sizes, our analysis of the tender documents identifies significant differences in lot sizes in both case study regions.

In **Berlin**, lot sizes are small. Normally, contracts for school meals are concluded for each school. Consequently, the lot sizes equate on average 300 meals. Smaller providers can take part in tenders as long as they can give evidence of at least three years of successful school catering experience.

In **Brandenburg**, the division of contracts into school-based lot sizes depends on the respective tendering authority. Lot sizes vary between 260 and 1 600 meals per day (Table 2). The average lot size in award processes in Brandenburg is significantly higher than in Berlin with 655 meals per day.

tendering authority	B1	B2	B3	B4	B5	B6	B7	B8	B9
meals per day	2 200	372	1 770	780	770	1 700	1 300	2.100	240
lot sizes	lot 1: 1 500 meals lot 2: 710 meals	lot 1: 372 meals	lot 1: 660 meals lot 2: 310 meals; lot 3: 510 meals; lot 4: 190 meals	lot 1: 260 meals lot 2: 520 meals	lot 1: 770 meals	lot 1: 700 meals lot 2: 1000 meals	lot 1: 580 meals lot 2: 720 meals	lot 1: 1 600 meals lot 2: 500 meals	lot 1: 240 meals

Table 2: Lot sizes in award processes in Brandenburg (B1-B9)

Small catering enterprises are excluded from tenders for large lots, because they will not be able to produce 1 000 or more meals per day. However, experts who were interviewed emphasise that tendering authorities tend to justify the decision to create large lots with the argument that small lot sizes are uneconomic. The experts view was that that it would be perfectly possible for the SMEs they know to fulfil the contract.

3.5 Supporting and inhibiting factors for local and organic foods

In order to evaluate if current procurement procedures in Berlin and Brandenburg support or inhibit LOF, we discussed our results of the analysis of tendering documents with experts.

3.5.1 Impact of the politically realised fixed-price on quality properties of school meals in Berlin

In Berlin, the city took a political decision to set a fixed-price of 3.25 Euro per school meal. According to the interviewed experts, this concept caused a “quality competition” among caterers driving an increase of organic food² to 40%. They added that the fixed meal price enabled catering enterprises to concentrate on food quality and to fulfil the requirements specified in the award criteria. Although the defined price of 3.25 Euro per meal was currently adequate to meet sustainability criteria, the consultations with experts revealed that parents and politicians often demanded a higher percentage of organic products. Caterers explained that organic meat was too expensive for the current fixed price per meal. According to the interviewed stakeholders, it would hence be necessary to discuss the fixed-price by the next procurement procedures in 2017. With a further increase of the price per meal, catering companies could continuously improve quality aspects.

3.5.2 Suitability of current award criteria with regard to the procurement of LOF

In the analysis of tender documents we already highlighted the differences between the award criteria in Berlin and Brandenburg. In Berlin, they are standardised for all procurement procedures, whereas award criteria in public tenders in Brandenburg are inconsistent. In this regard the experts pointed out that the unified award procedures in Berlin led to more transparency and simplification than seen in Brandenburg. Due to clear signals given by the tendering authorities, catering companies were able to improve their performance and therewith the food quality. Conversely, award criteria in public tenders in Brandenburg were highly varied, which, according to the experts, makes compliance very difficult for catering companies. The interviewed stakeholders concluded that in order to ensure equal opportunities for all enterprises and to improve quality, standardized award procedures should be discussed.

The experts criticise furthermore the use of certain award criteria, such as “regionality”, because it is not clearly defined and therefore hard to verify by tendering authorities. Such imprecise criteria led to a lack of transparency and potential disadvantages for catering companies. The same observations were made related to award criteria in Berlin. Following caterers’ arguments, the usual test meal, amounting 50 % of the total score, was overrated. They argued that the test meal was prepared for adults and under conditions which never reflected daily cooking for school kids. Caterers asserted that it would be more appropriate, if daily meals in school were tested unannounced.

The consultations with experts showed, that criteria such as sensory quality seemed to be overvalued, whereas too little importance was paid to other criteria like origin of ingredients. Although, public tenders demanded a minimum percentage of organic products, according to the caterers information on the origin of the products was not required. We see that public institutions do not yet use their potential to promote regional value-based food chains for large consumers, which would be necessary in Brandenburg. Experts highlighted that the current lack of availability of local organic foods and the costs involved constituted a barrier for catering companies for local sourcing. They concluded that as long as local products were not required in tender procedures, enterprises preferred to purchase the products from wholesalers to lower costs.

² According to education authorities, the percentage of organic food in school meals was 10 % in more than half of the schools and 20 % in nearly one third of the schools (Arenz-Azevedo and Tecklenburg 2012)

3.5.3 Opportunities and constraints for SME to take part in tendering procedures

The consultations with experts confirmed that the division of contracts for school meals into small lot sizes offered opportunities for smaller catering companies in Berlin. According to the experts interviewed many small enterprises had won contracts with public schools. A major aim of the current procurement procedures was thus attained. However, the objective to attract more newcomers or companies in other areas of communal catering was not achieved. The precise reasons for this lack of participation on the procurement procedures were not known.

The experts presumed that the large lot sizes and the associated large contract values in Brandenburg impeded the participation of small or new businesses. They pointed out that it was increasingly difficult for these companies to access the market, because a certain company size was necessary in order to fulfil the contract requirements.

4. Discussion and conclusions

An analysis of public procurement regulations and of findings from the literature illustrates that EU-regulations legitimate sustainable or “green” procurement. There is widespread public discourse supporting the procurement of sustainable products and services. A number of aspects, such as local and organic food, waste avoidance, the use of ecological materials, compliance with social standards and the support of SMEs are considered to be sustainable. Although the modernisation of European public procurement law enables the inclusion of various aspects of sustainability in award procedures, research results from the literature show that sustainable public procurement has been hardly implemented.

Our research results confirm the initial hypothesis. We have found evidence of a clear discrepancy between theory and practice in current procurement procedures. There are significant weaknesses in the two different model regions that we studied. The analysis of the two neighbouring regions of Brandenburg, a large Federal State in north-eastern Germany and the City-State of Berlin shows that even in the same geographical region with similar legal frameworks, the implementation of public procurement processes differs significantly. We see that, in Brandenburg, price is an essential factor and most award decisions focus on value for (little) money instead of local and organic products. Although, several tendering authorities consider LOF within the award criteria, they have a small impact on the decision-making compared to other criteria such as price or sensory quality. In contrast, the Berlin model with a fixed-price per school meal and standardised award criteria led to a “quality competition” resulting in an increase of organic products in school kitchens up to 40 % of the total catering volume. This comparison indicates that a careful selection of award criteria and the weighting of price and quality criteria is a key factor for the share of LOF in public kitchens. Related to the suitability of current award criteria applied by public authorities, our results reveal that certain award criteria like “percentage of local foods” are insufficiently defined, whereas other criteria like “sensory quality” seem to be subjective or overrated. When applying these criteria in public tenders, tendering authorities have to be aware that they complicate the transparent evaluation of bids and could hence cause uncertainties for the catering companies. Another relevant factor for sustainable procurement is the determination of contract sizes by tendering authorities. The results of our study confirm the importance of smaller lot sizes for the participation of SMEs in procurement procedures.

The lessons learned from the analysed case studies in Berlin and Brandenburg illustrate that the drafting of tender documents, including clearly defined award criteria, is essential for the realisation of sustainability goals in public procurement processes. Approaches for the increase of local and organic food services deriving from our findings are:

- the importance of clear political signals related to a desired product quality, for example by the declaration of a requirement for a fixed share of LOF products
- the determination of fixed-price for the school meal, in order to prevent a price competition at the expense of sustainability goals as successfully realised in the city of Berlin.
- standardised award criteria – as practised in Berlin, but not in Brandenburg – make it easier for businesses and thereby encourage more businesses to prepare tenders for the public sector
- the definition of precise and transparent award criteria which are easily verifiable, in order to minimise complaints and ensure a fair competition
- the division of contract sizes into smaller lot sizes, in order to enable access for SMEs and newcomers

Finally, we would like to highlight two open questions that result from our research, first, the specification of lot sizes and second, the definition of award criteria. Will it be possible to define suitable lot sizes for LOF procurement and if yes, what would be an adequate lot sizes which enable the access for locally based and/or new businesses? Furthermore, appropriate award criteria– in particular for the procurement of local foods – have to be developed. In order to meet these challenges, public authorities can use legal tools like the “competitive dialogue” or “technical dialogue” to develop together with catering companies solutions for local and organic food services.

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