

Proposal for changes to be introduced to CPSV-AP to accommodate proactive and event services

Estonia appears to be the first Member State of the European Union, which has defined by regulation proactive and event services. The other Member States and the European Commission are likely to follow soon. For this reason, the CPSV-AP (European Commission, 2018) needs to be updated to accommodate proactive and event services. The purpose of this document is to open a discussion for introducing the relevant changes into the CPSV-AP (European Commission, 2017).

Proactive services are defined as the direct public services provided by an authority on its own initiative in accordance with the presumed will of persons and based on the data in the databases belonging to the state information system. Proactive services are provided automatically or with the consent of a person (Estonian Government, 2017).

Event services are the direct public services provided jointly by several authorities so that a person would be able to perform all the obligations and exercise all the rights conferred on the person due to an event or situation. An event service compiles several services (*component service*) related to the same event into a single service for the user (Estonian Government, 2017).

We propose the following changes to be introduced to CPSV-AP to accommodate digital proactive and event services:

1. Introduce to CPSV-AP the classes of service activities, which are shown using the blue colour in Figure 1 by Guarino (2017).
2. Substitute the class Service request processing in Figure 1 with the class Service initialisation processing.
3. Add the Triggers association originating with the cardinality 1 in the class Event in CPSV-AP (European Commission, 2017) depicted in Figure 2 and ending with the cardinality 0...* in the newly introduced class Service initialisation processing.
4. Elaborate the Event class in CPSV-AP (European Commission, 2017) as is shown in Figure 3 according to the ontological foundations proposed by Sterling & Taveter (2009).

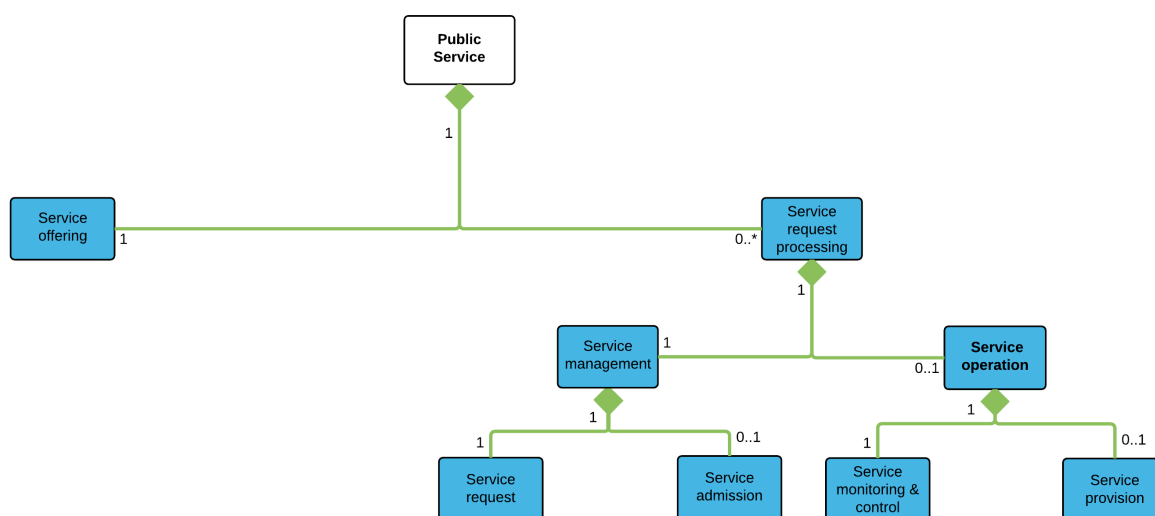


Figure 1. The classes of service activities (Guarino, 2017)

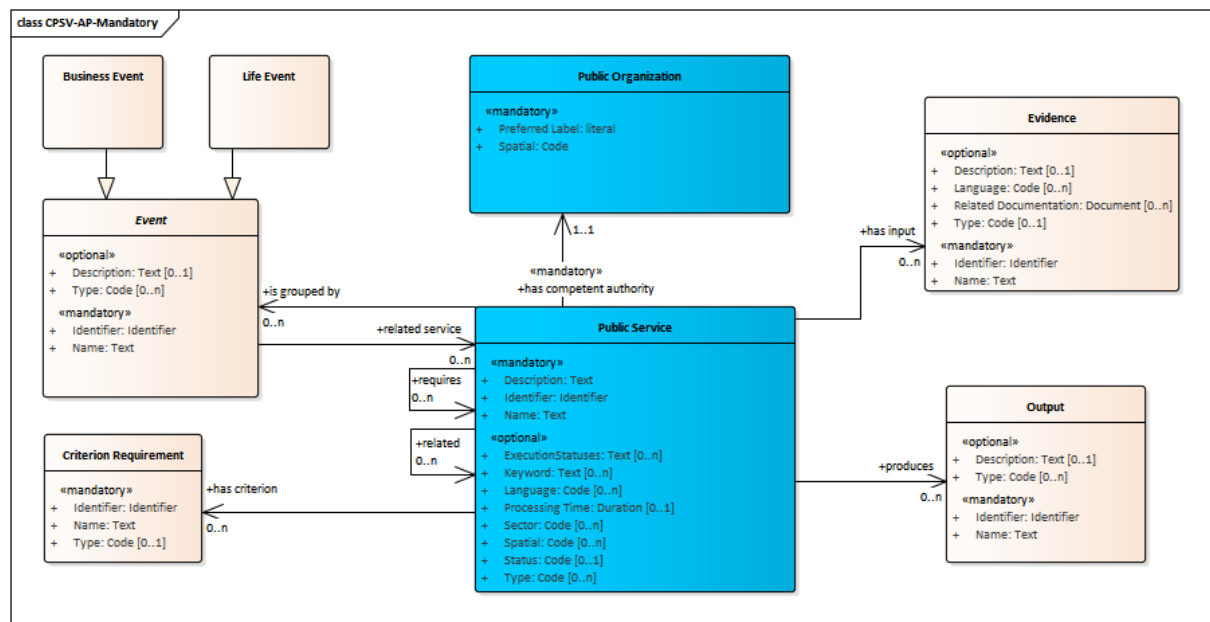


Figure 2. The classes and properties in CPSV-AP that define the service itself (European Commission, 2017)

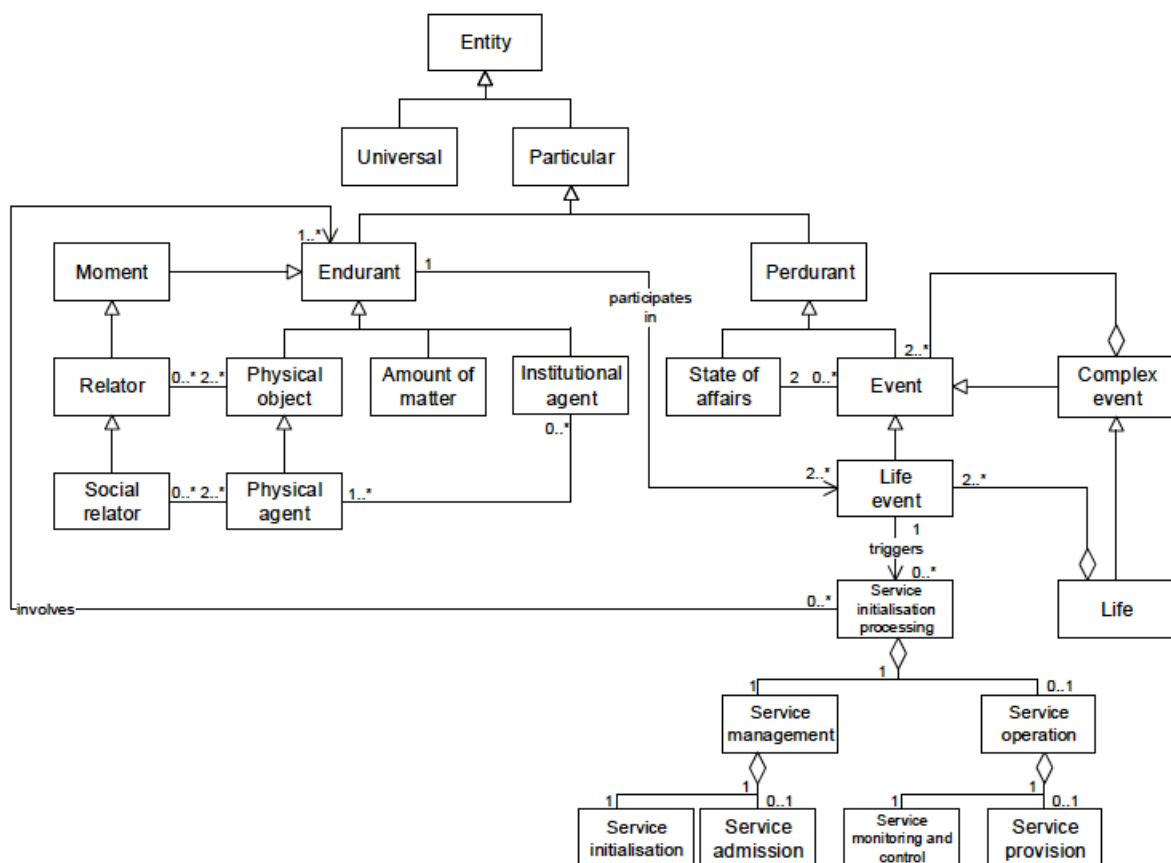


Figure 3. Elaborating the Event class in CPSV-AP according to the ontological foundations proposed by Sterling & Taveter (2009)

References

- [1] Estonian Government (2017). *Principles for Managing Services and Governing Information: Passed 25.05.2017, Annex 88*. Last retrieved on 19 April 2018 from <https://www.riigiteataja.ee/en/eli/507072017004/consolide>
- [2] Guarino, N. (2017, October). Services as Activities: Towards a Unified Definition for (Public) Services. In *Enterprise Distributed Object Computing Workshop (EDOCW), 2017 IEEE 21st International* (pp. 102-105). IEEE.
- [3] European Commission. (2017). *D04.01 – Core Public Service Vocabulary Application Profile 2.1: CPSV-AP 2.1*. 2017-09-25. Last retrieved on 19 April 2018 from <https://joinup.ec.europa.eu/release/core-public-service-vocabulary-application-profile/21>
- [4] Sterling, L., & Taveter, K. (2009). *The Art of Agent-Oriented Modelling*. Cambridge, MA and London, England: MIT Press.