This research project studies compatibility of system of systems engineering methodologies with the ARKI research group’s proposal for co-design philosophy and approach and their applicability to the engineering of the application development environment of the ARKI research group.

Based on the literature and observations this thesis shows that the application development environment of the ARKI research group can be considered as a system of systems having the characteristics of complex systems. Thereby system of systems engineering methodology, complex systems engineering, is suggested preferable to other approaches to engineer the application development environment of the ARKI research group. In addition compatibility of complex systems engineering with the ARKI research group’s proposal for co-design is justified. Further, this research suggests that the complex systems engineering approach used in combination with the practice-centered co-design approach might benefit in general the development of everyday life applications.

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