

AN AUTONOMIC MANAGER FOR EDGE- COMPUTING PLATFORMS

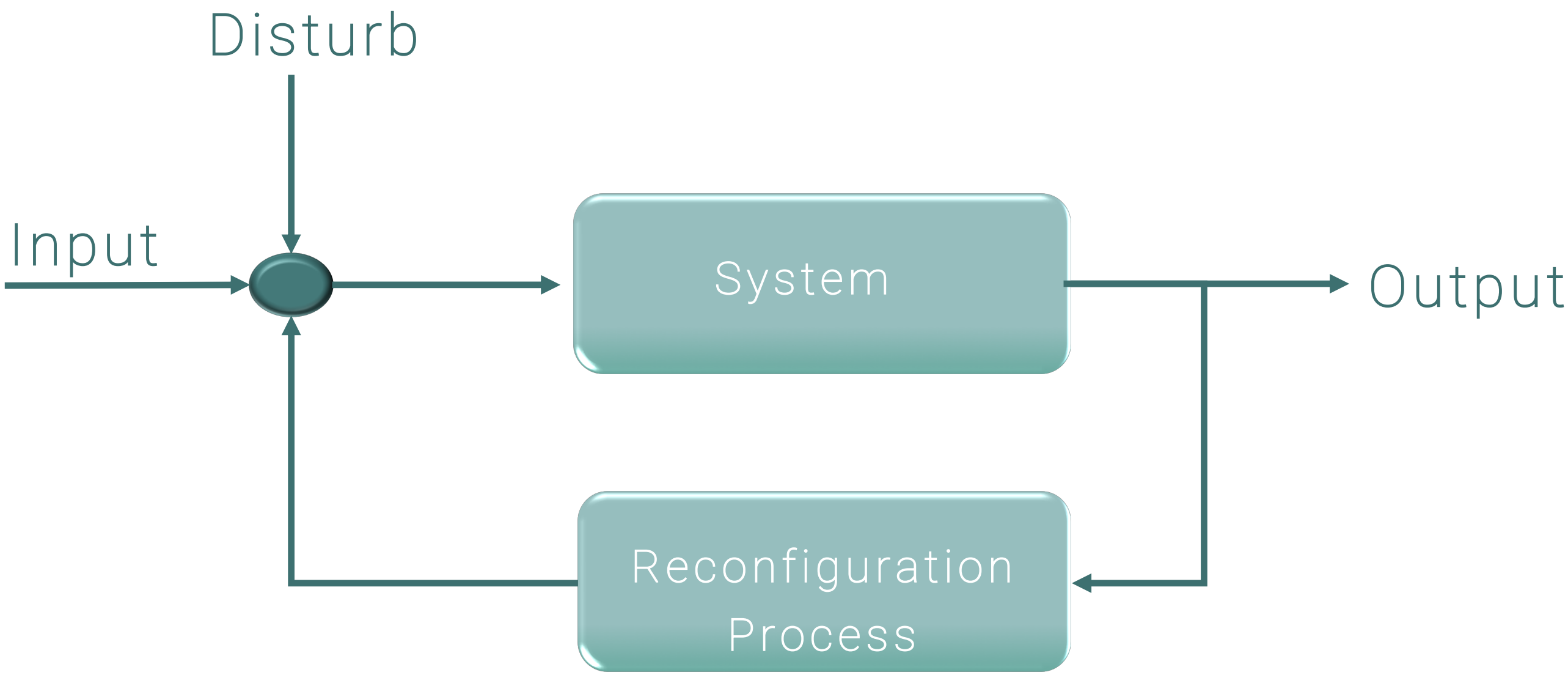
Gabriella D'Andrea, Tania Di Mascio, Luigi Pomante and Giacomo Valente

{gabriella.dandrea@graduate.univaq.it, tania.dimascio@univaq.it, luigi.pomante@univaq.it, giacomo.valente@univaq.it}

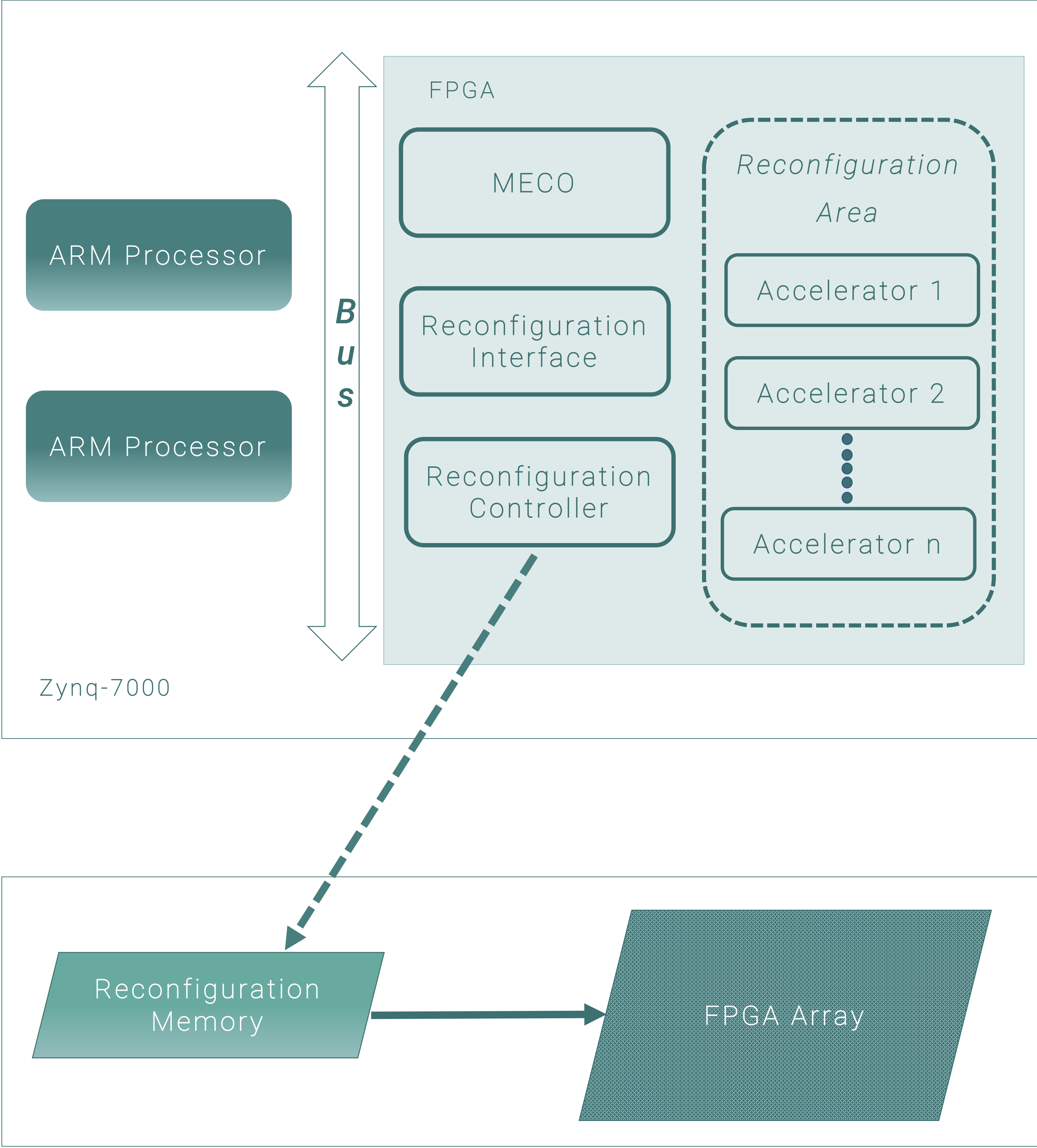
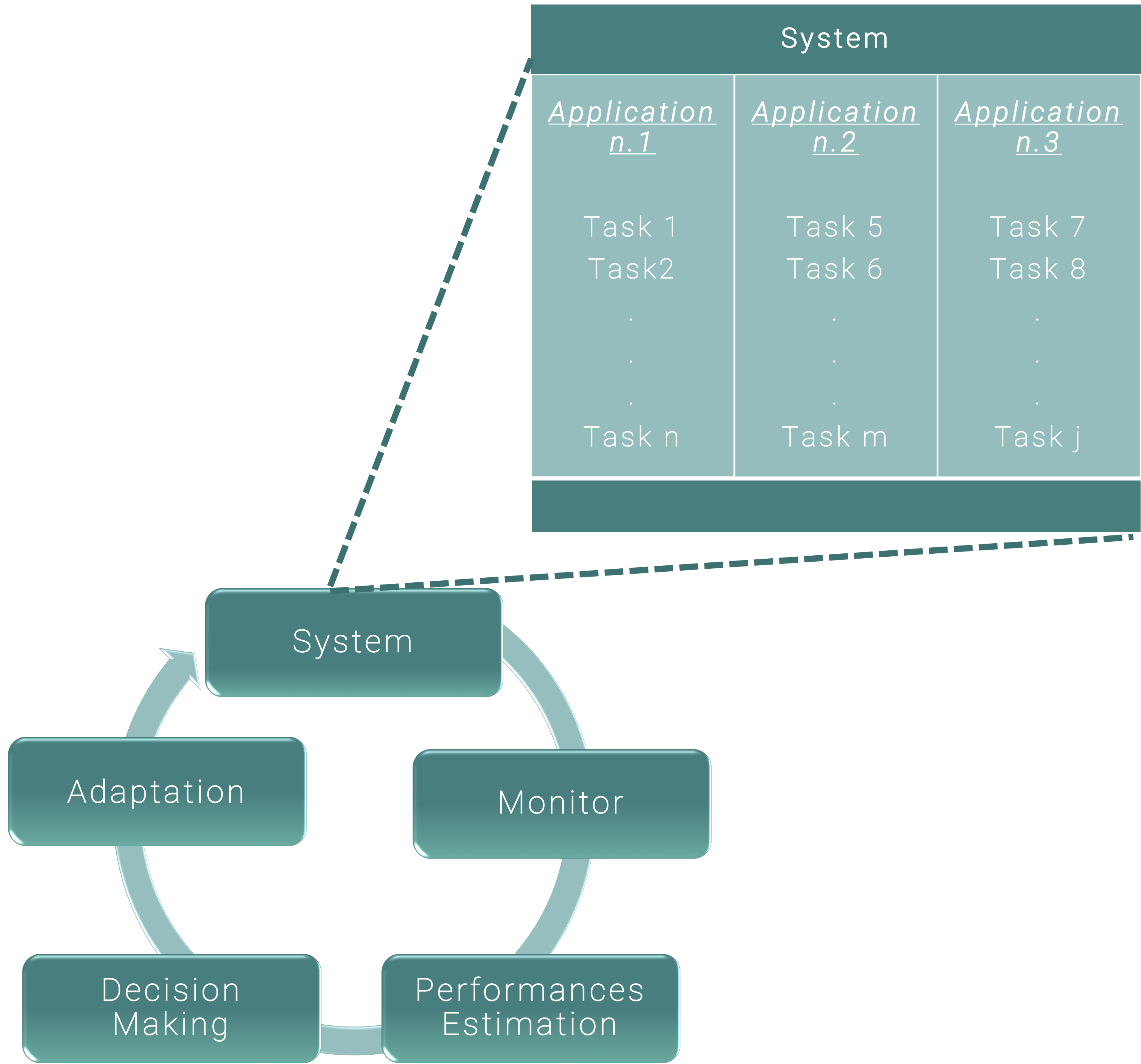
Introduction

- MECO goal - To manage the self-adaptivity of Cyber-Physical Systems (CPSs) at the edge, evaluating the possible use of a Dynamic Partial Reconfiguration (DPR).
- When CPSs ask to MECO?
 - When the CPS must adapt itself to environment changes.
- How MECO does respond to CPSs?
 - Whether a DPR is profitable or not (in term of timing performances);
 - A number quantifying the time delay eventually introduced by DPRs.

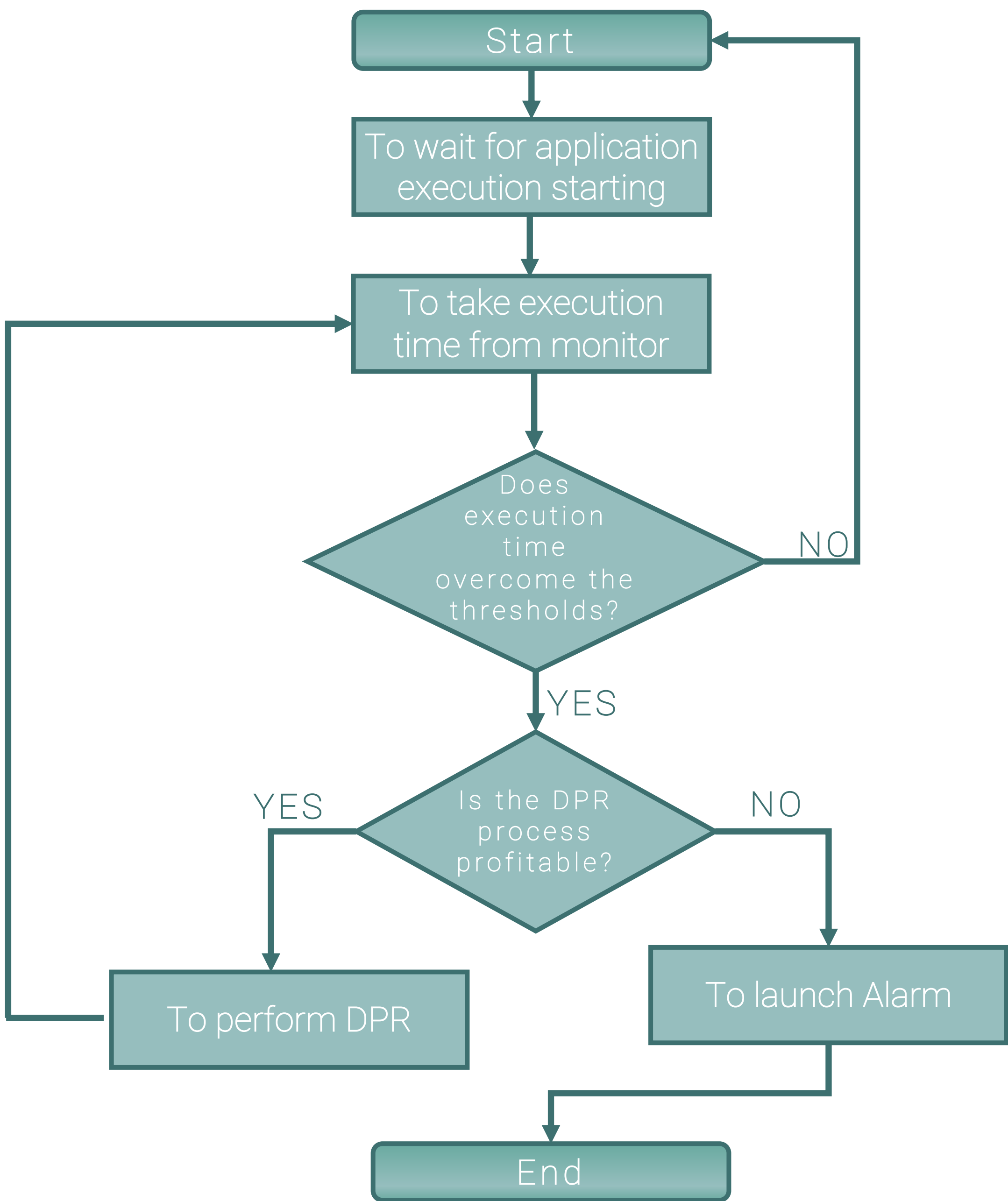
Context of Use: self-adaptive loop



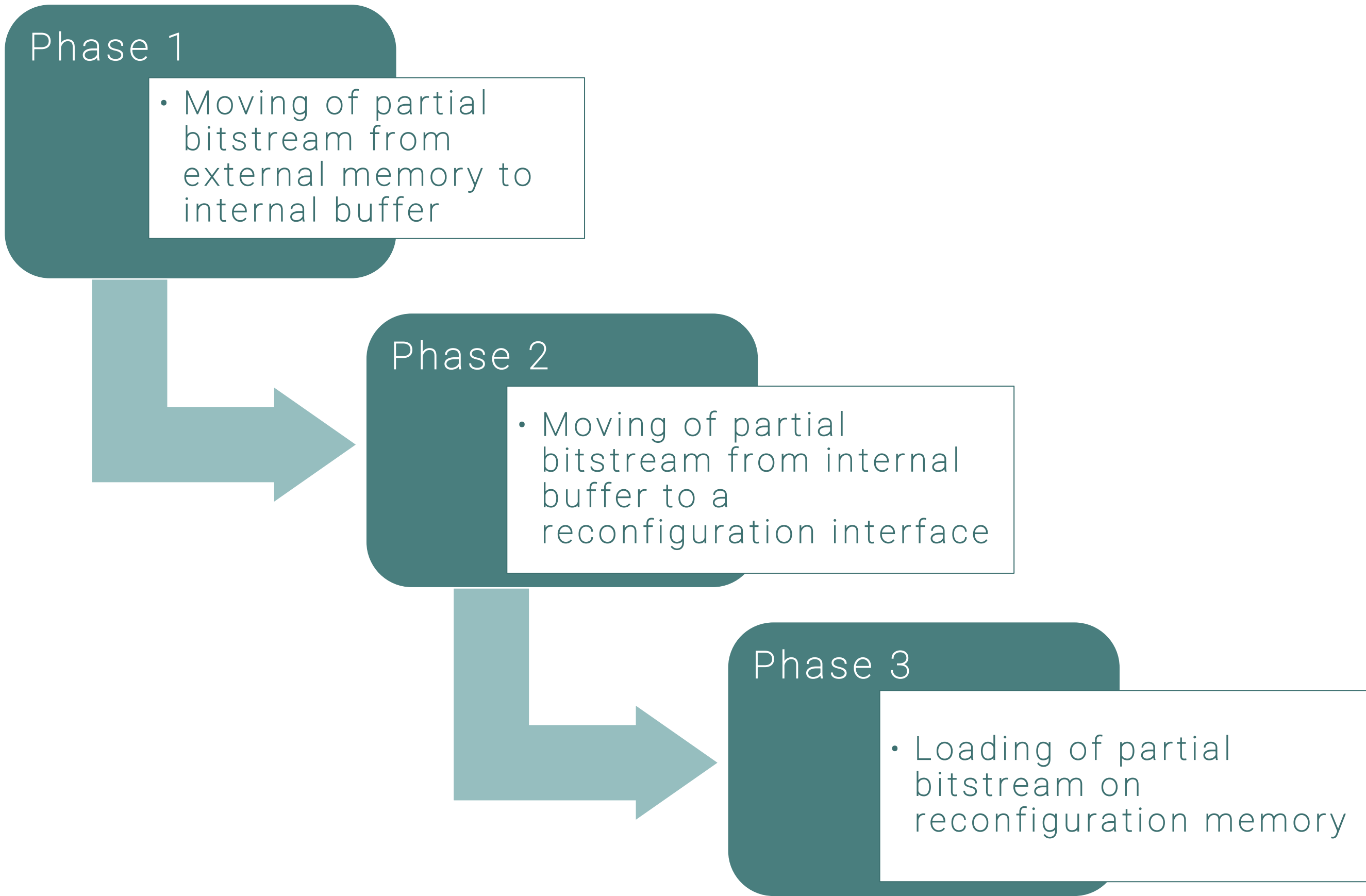
MECO self-adaptive loop and the proposed hardware implementation



MECO flow



Dynamic Partial Reconfiguration Phases on FPGA



Acknowledgements

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