



DREAM project presentation Interaction Meeting, Grenoble

Raphael Caire, Grenoble INP

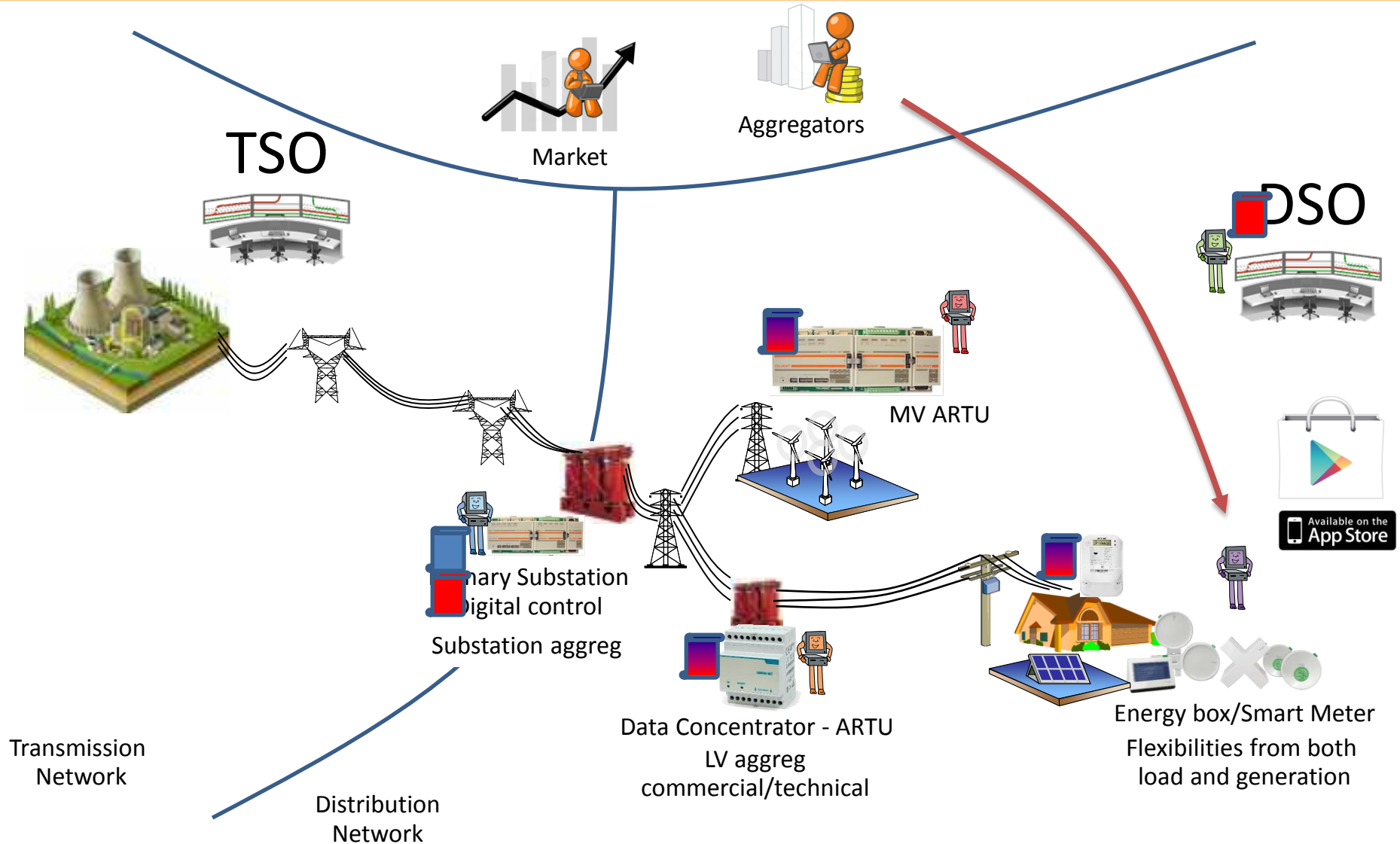
16th of December 2015

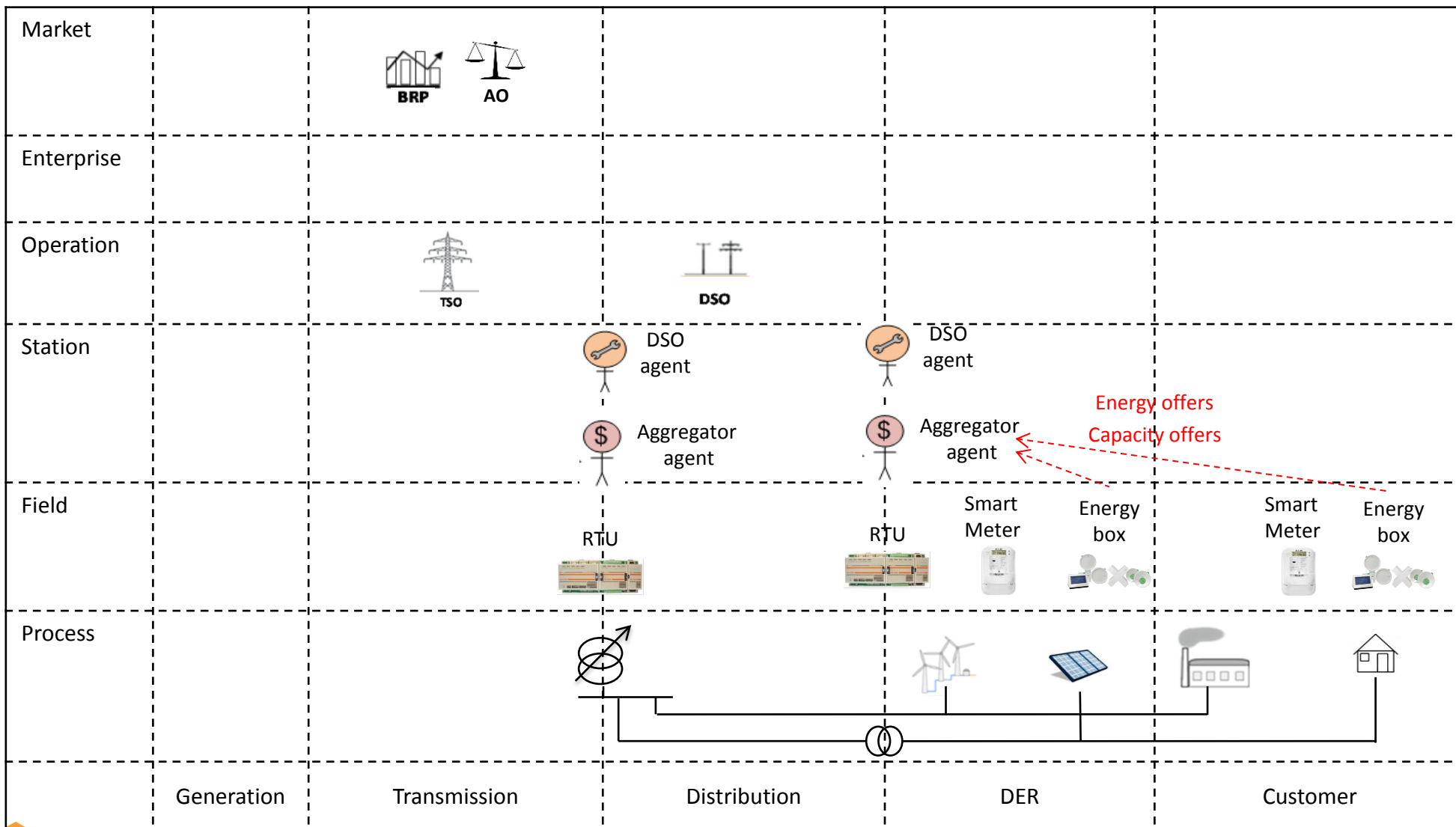


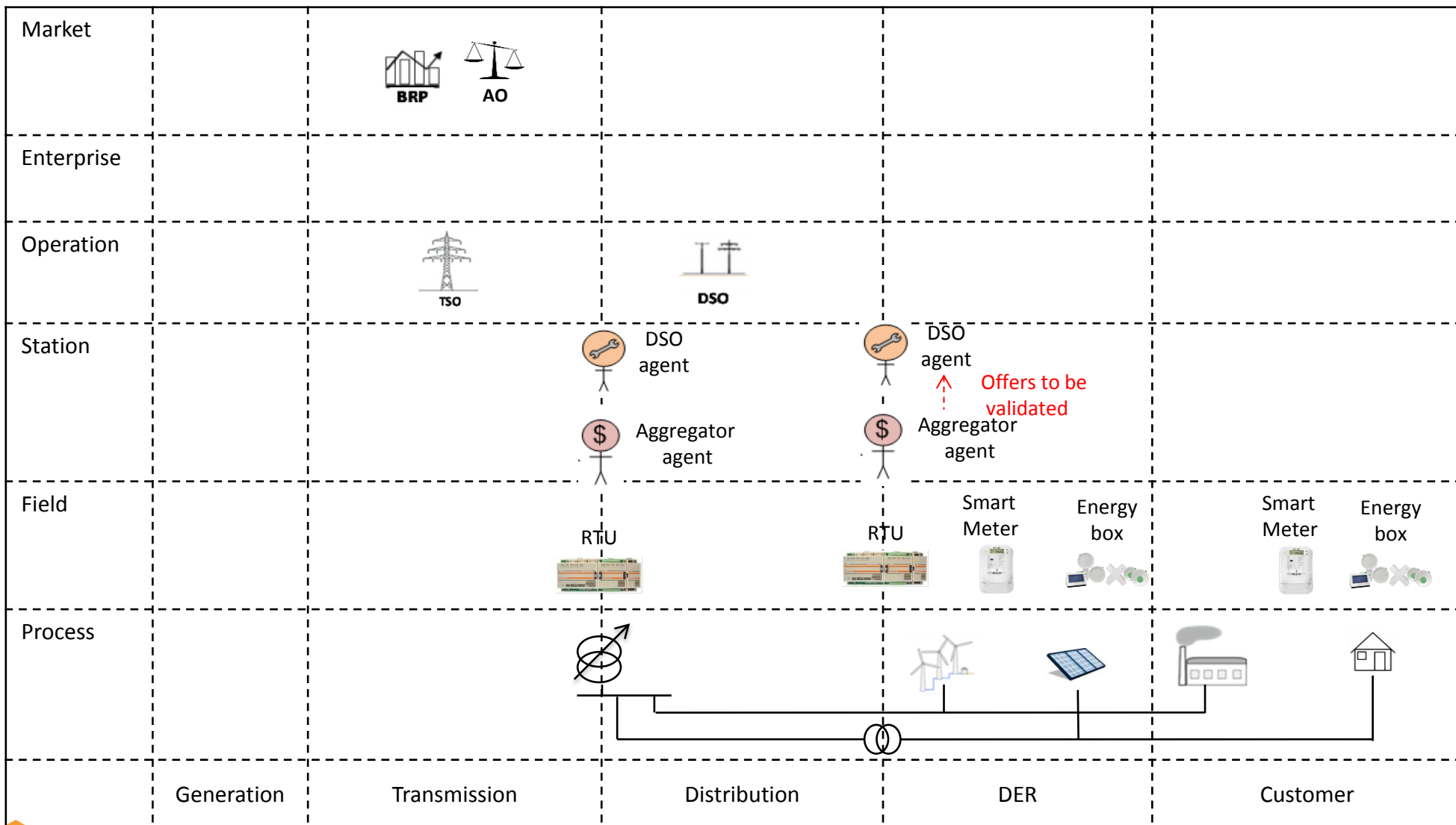
Major challenge and outcome of DREAM

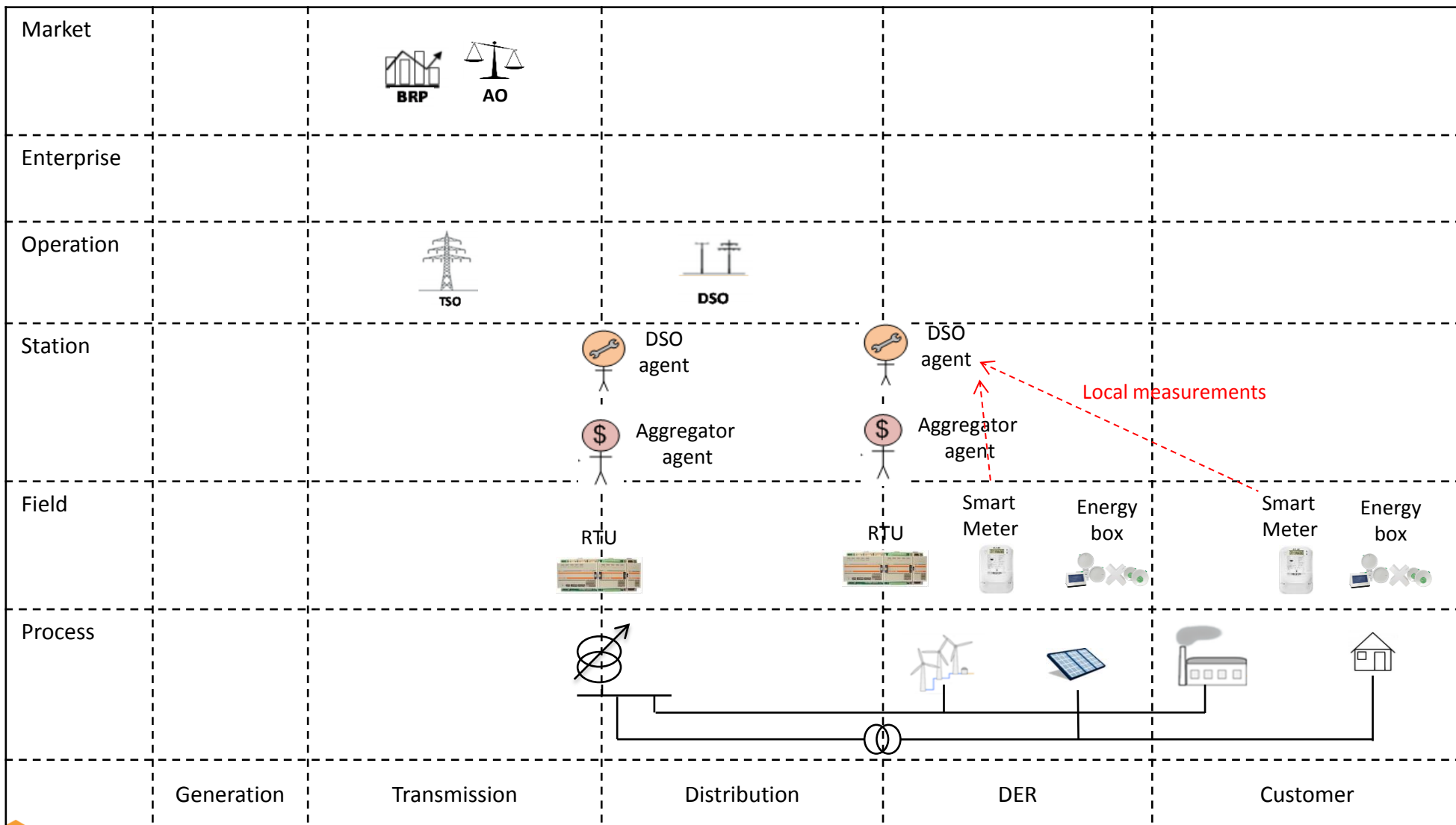
- Enhance **market based approach to Distribution level with DNO validation** → validate concepts and recommend regulation evolutions
 - Validate the concept on different grid types and propose evolution for a market based approach of both energy/ancillary services/emergency reserve markets & coordination
 - DSO role: market enabler/facilitator (market platform + validation at different voltage levels)
 - DSO role: market participant (buying flexibilities to solve constraints in real time)
- Show that increased **distributed “intelligence”** combined with **limited structural modifications** is able to allow **larger amounts of DER** (including RES, novel loads and storages), decrease costs without compromising quality of service, taking into account the **interaction of ADA functions**.

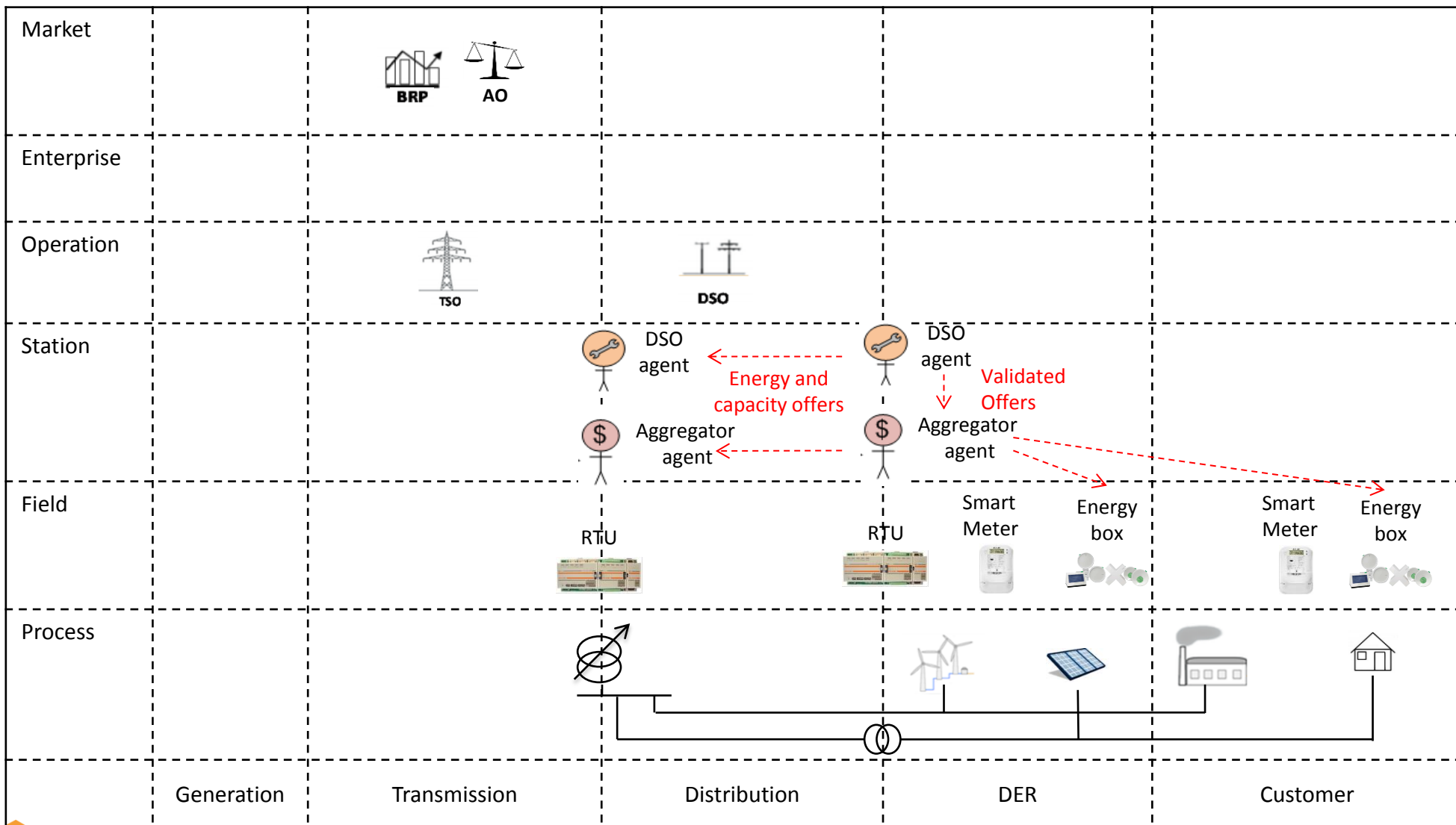
DREAM vision – focus on key components

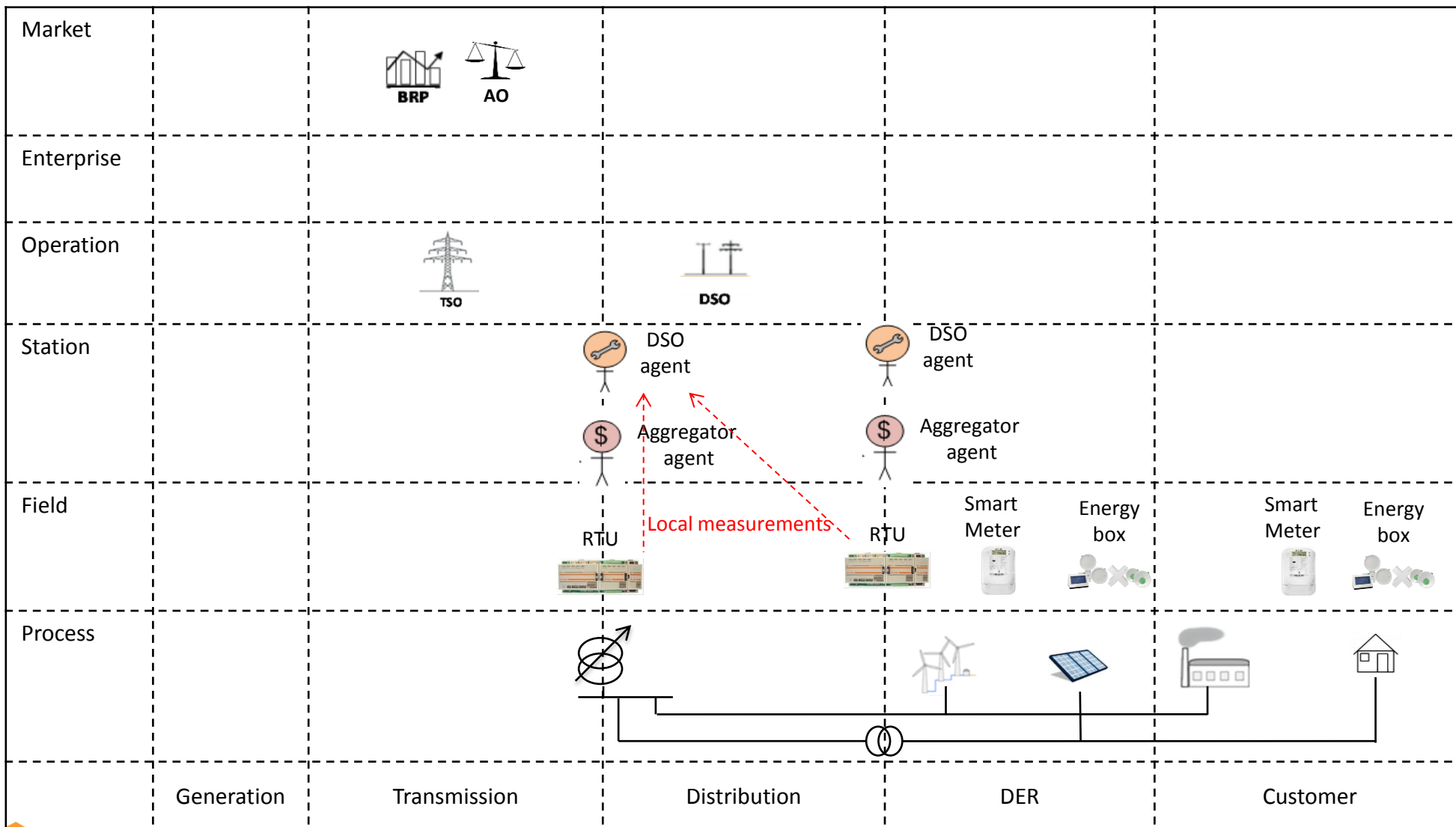


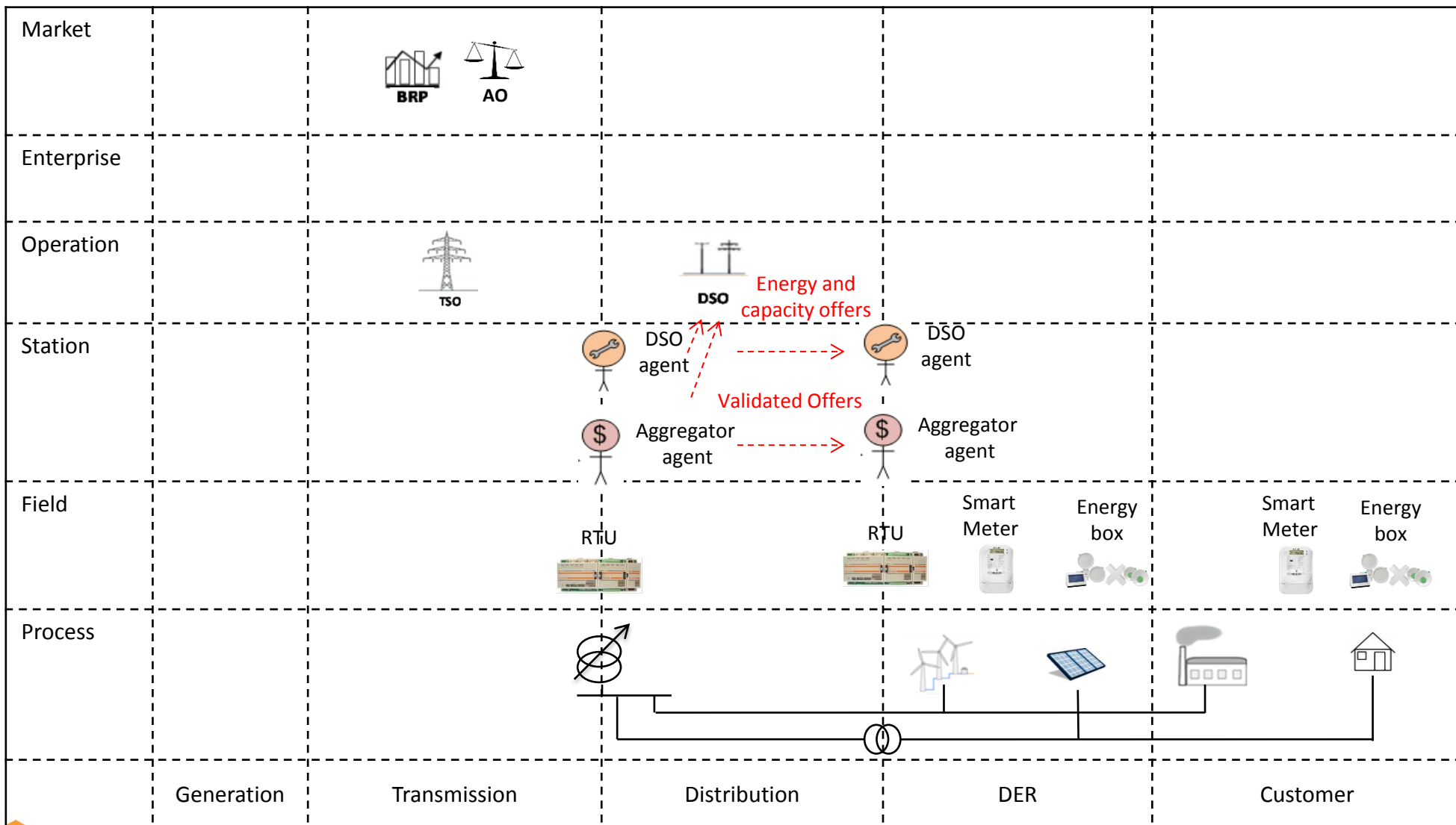


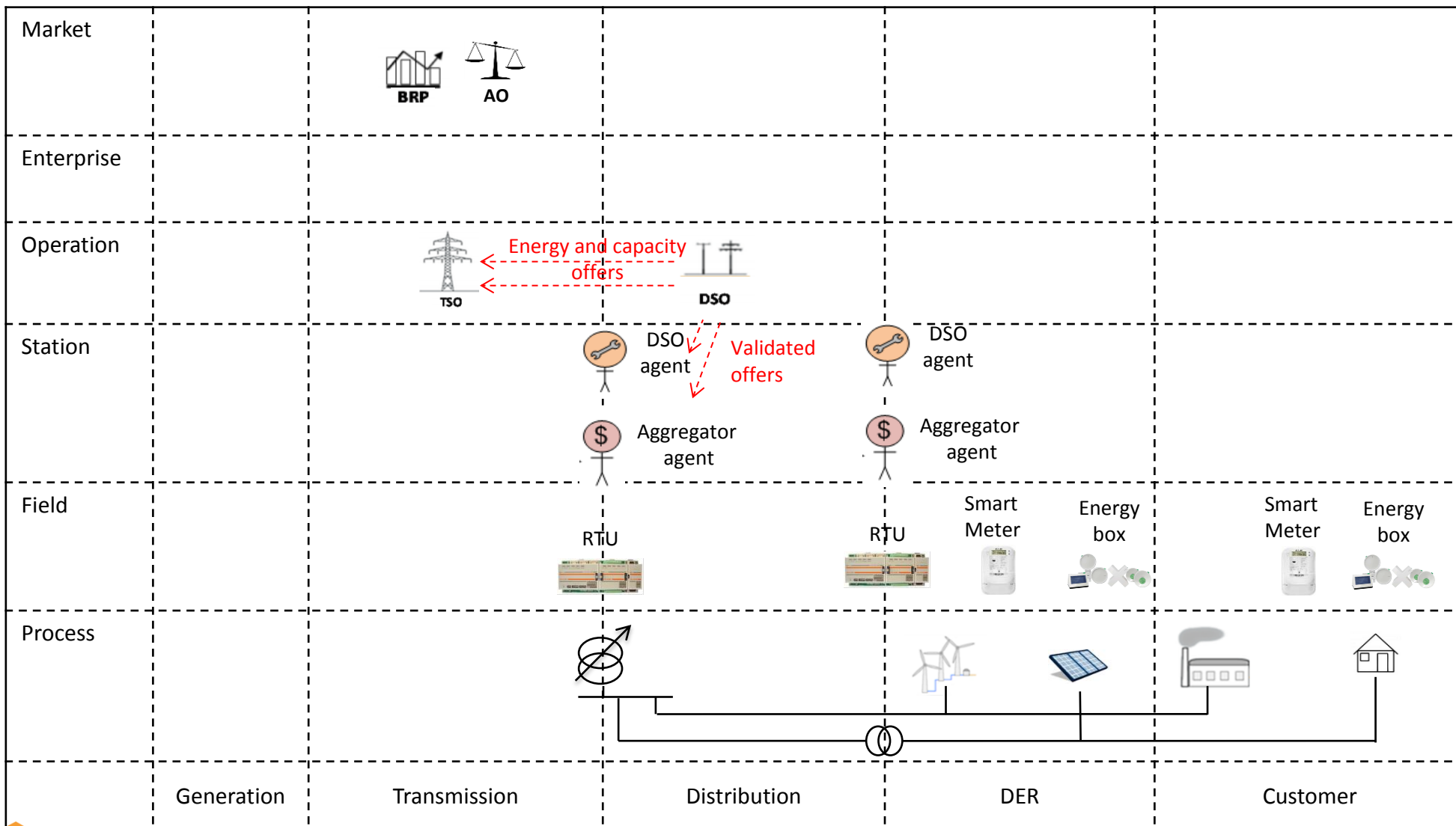


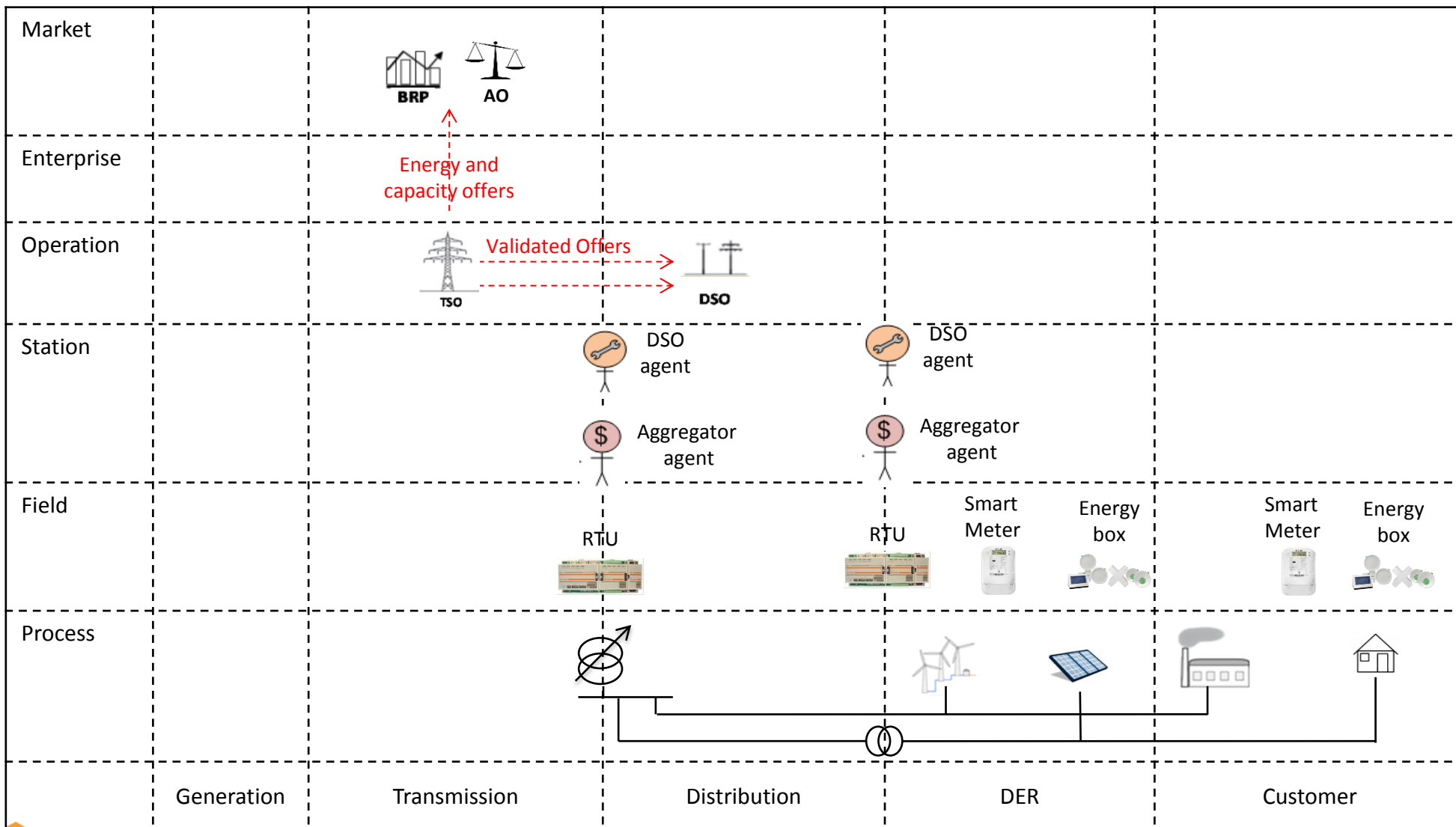




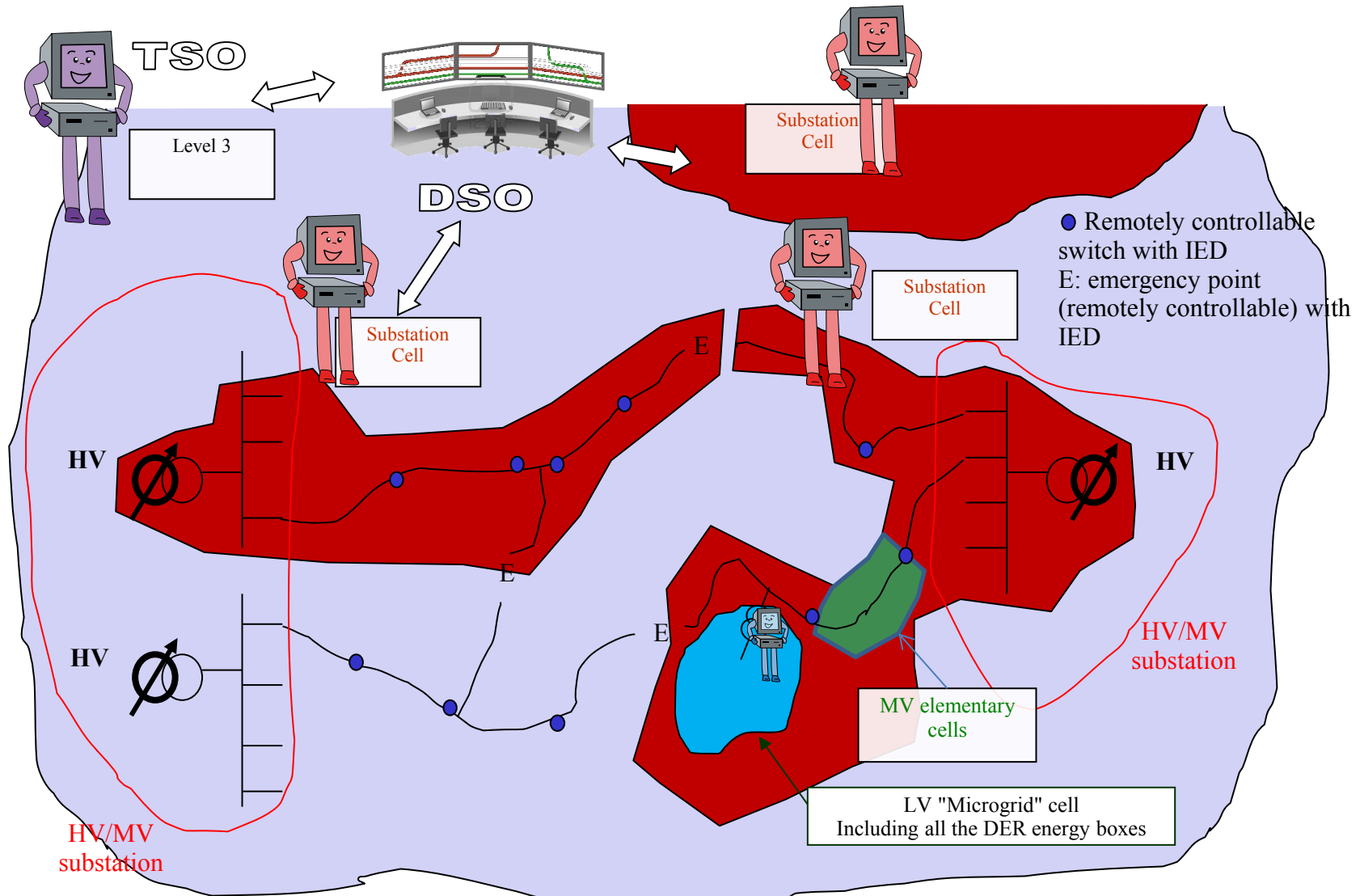




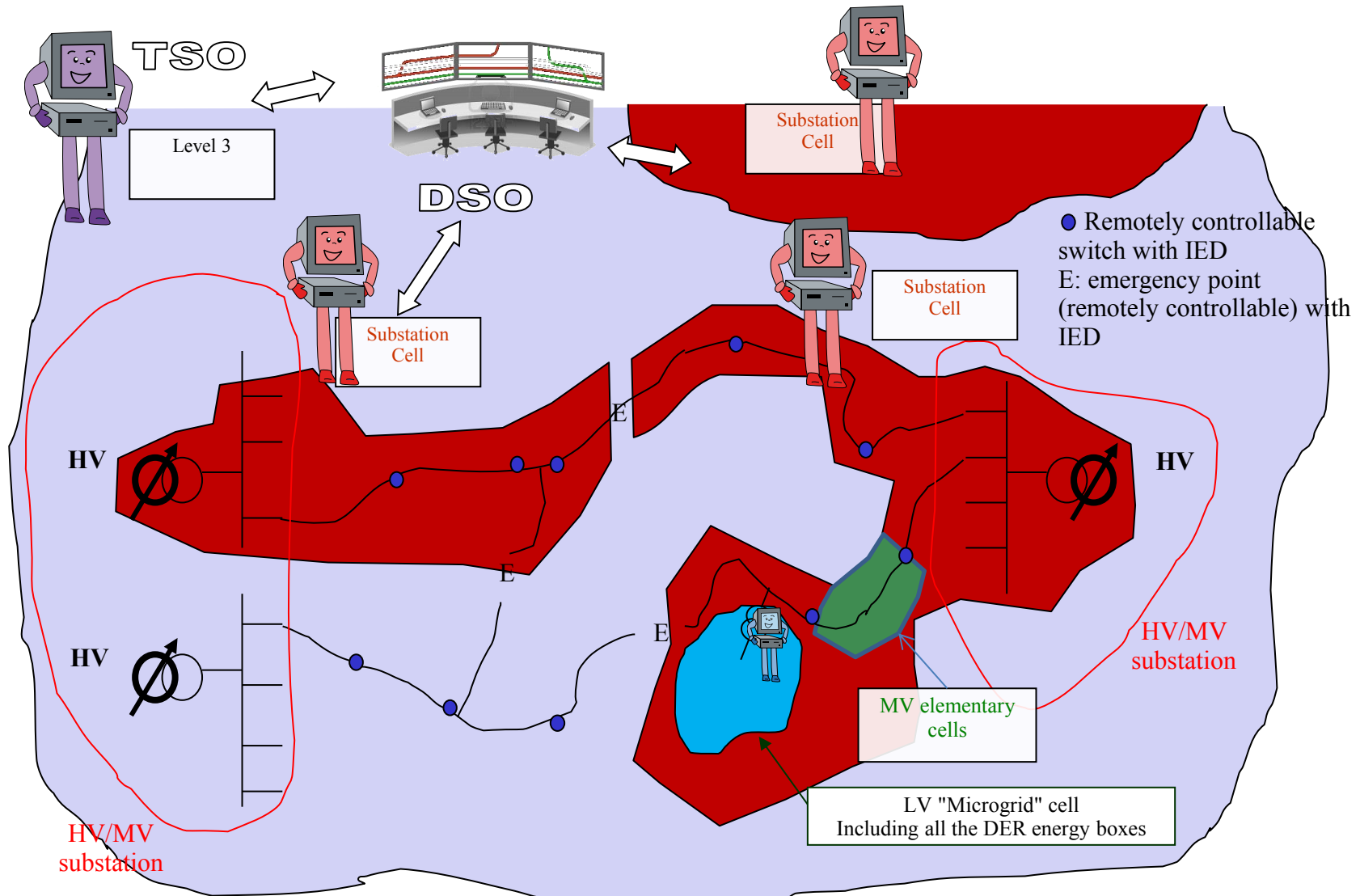




Heterarchic approach and energy/balancing markets [1]



Heterarchic approach and energy/balancing markets [2]





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