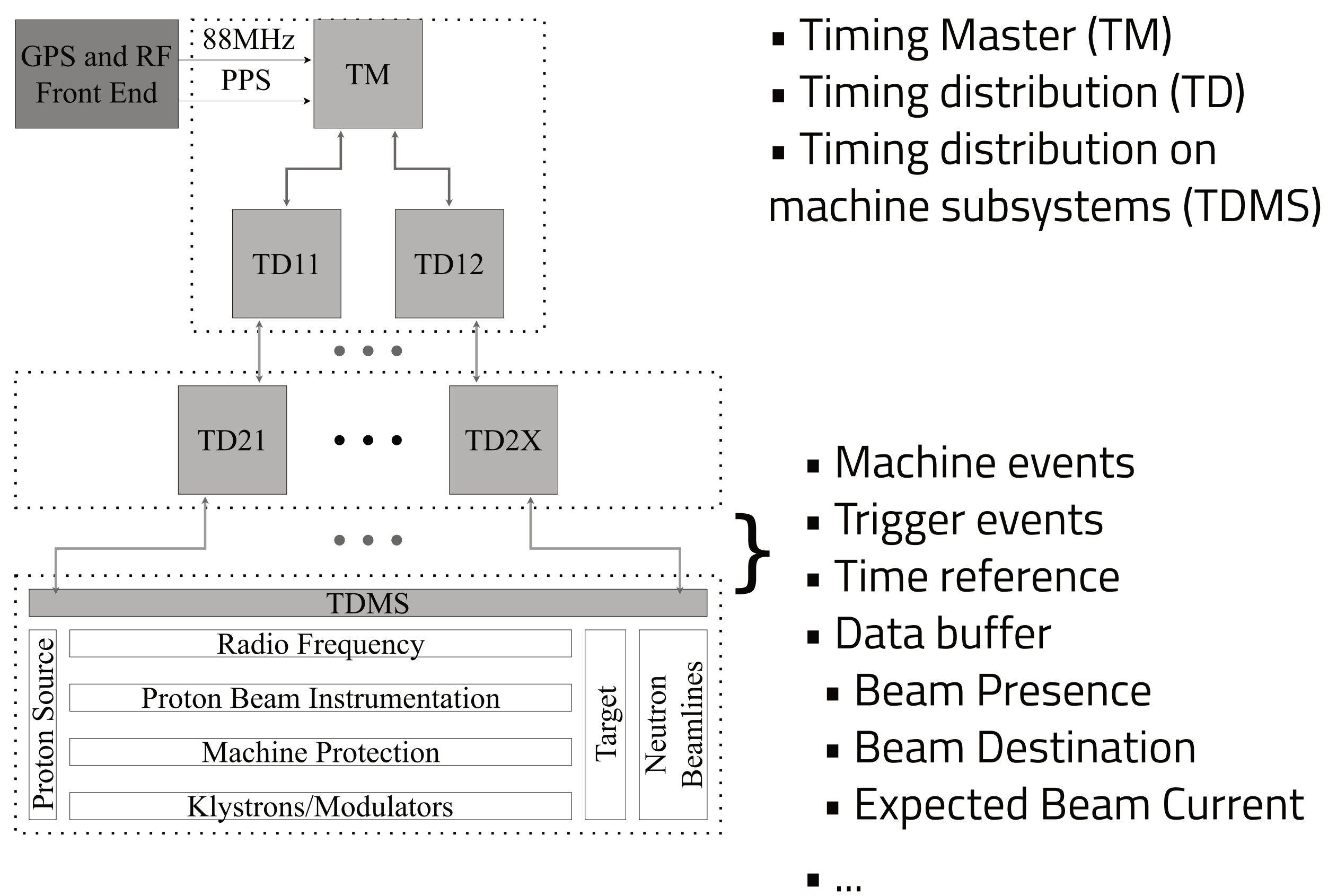
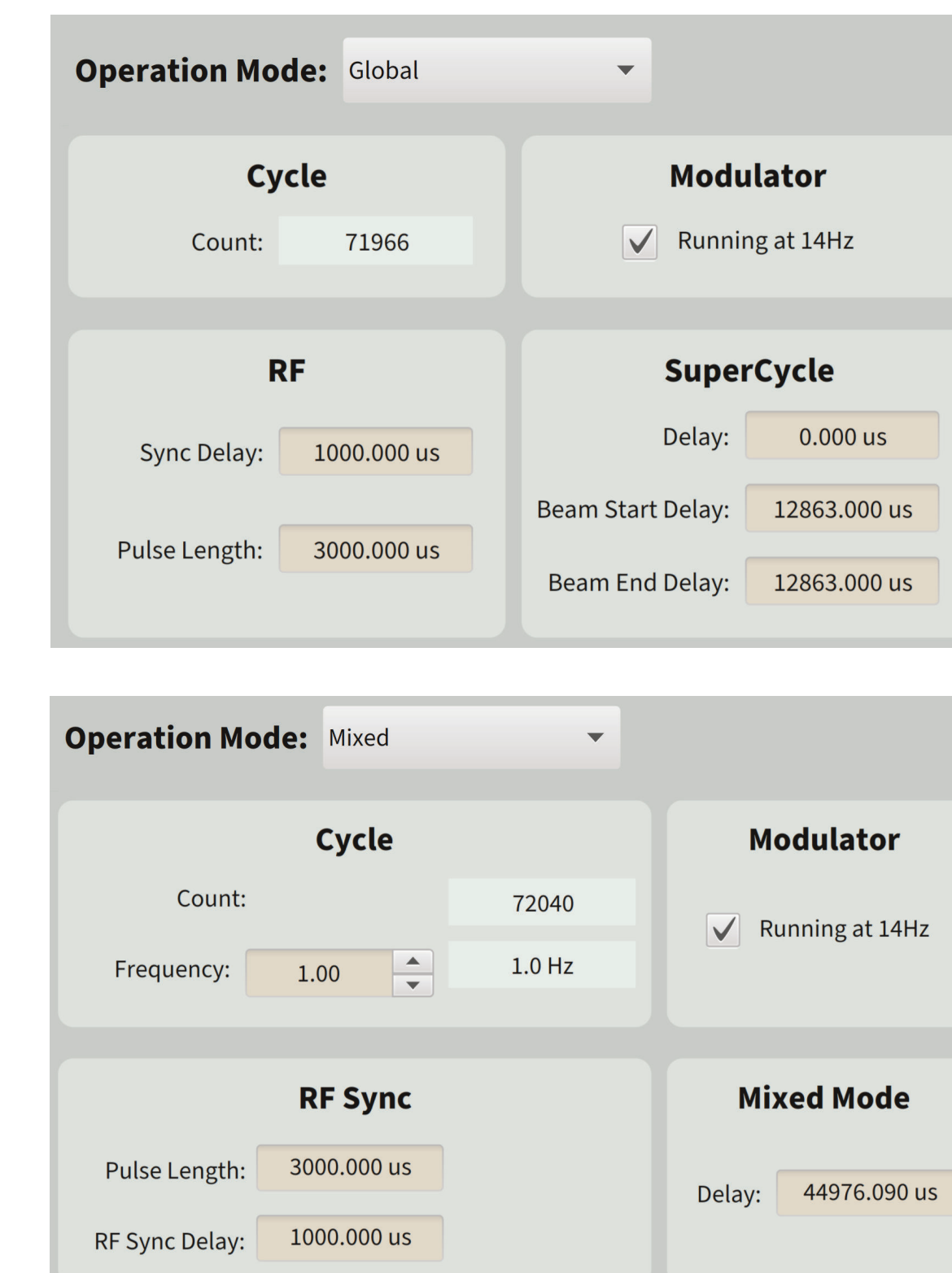
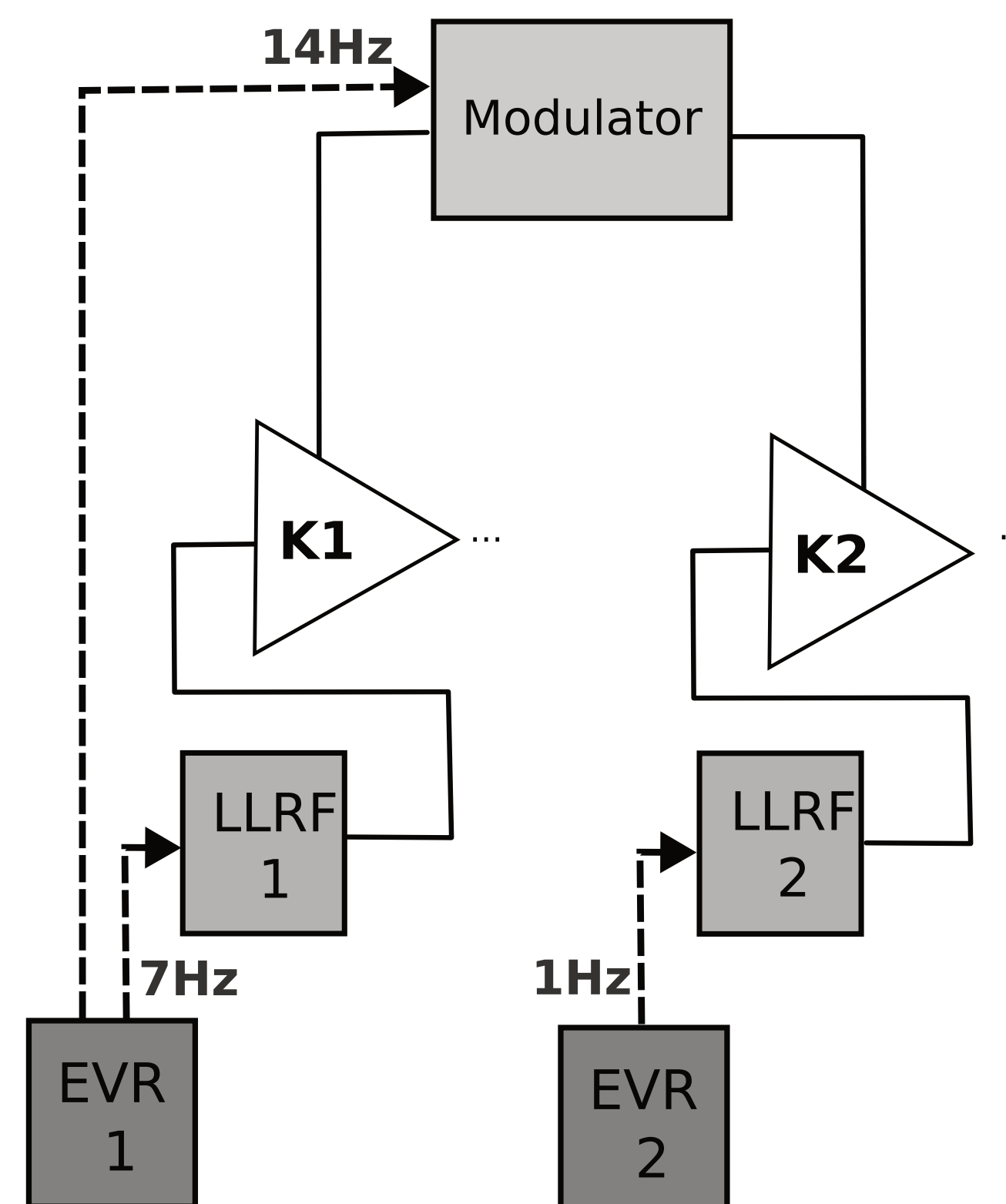


## 1. ESS Timing



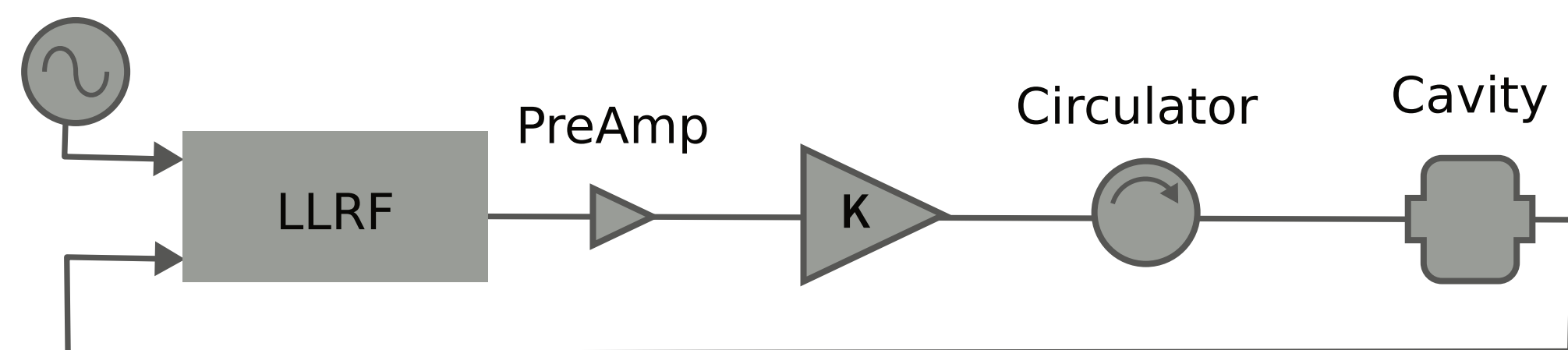
## 3. Timing modes



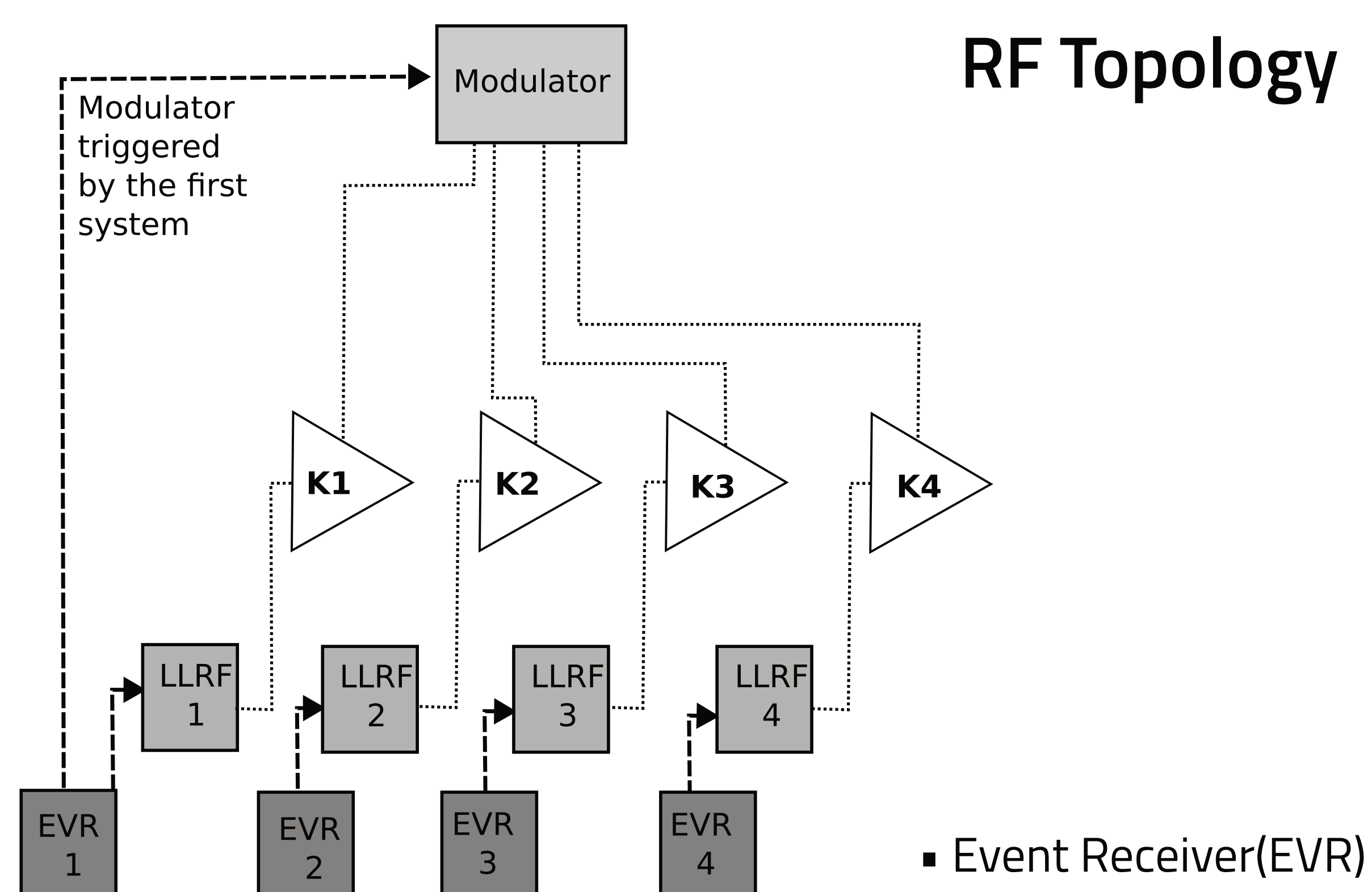
User interfaces for timing modes

- Implemented on the EPICS Database
- User do not need to interact with the EVR configuration

## 2. ESS LLRF

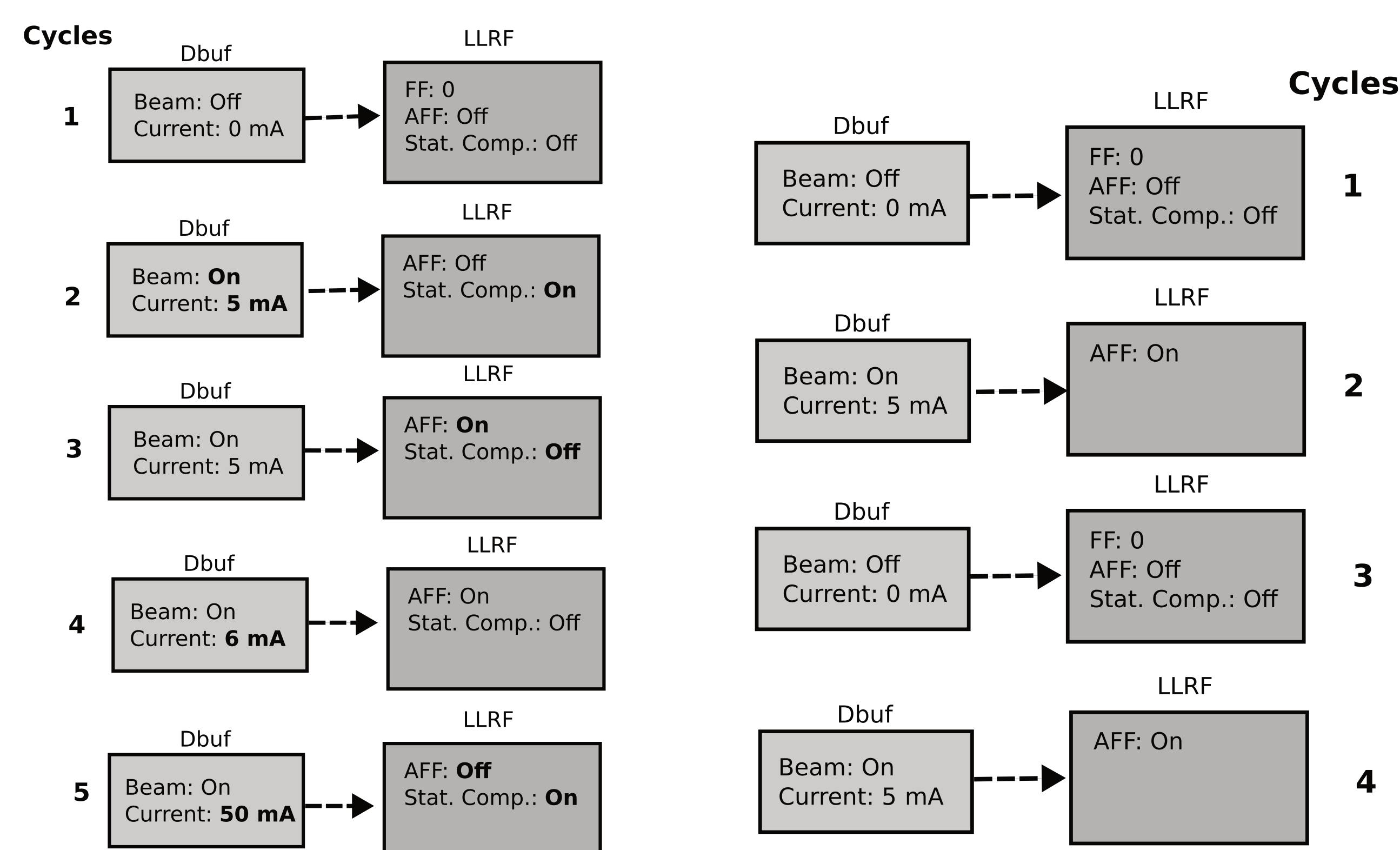


- PID Controller
- Adaptive Feed Forward (AFF)
- Static Feed Forward Compensation
- Monitoring signals



## 4. Beam Operation

- Data buffer information to control how LLRF will compensate the beam
- Integration made on the EPICS Database



1st Scenario:  
LLRF will react on different Data Buffer information

2nd Scenario:  
Beam at 7Hz and RF at 14Hz

## 5. Results

- Beam Commissioning in parallel to Cavities conditioning
- Better RF compensation within beam
- RF and Beam compensation on different repetition rates

