

# Operation Requests Concept

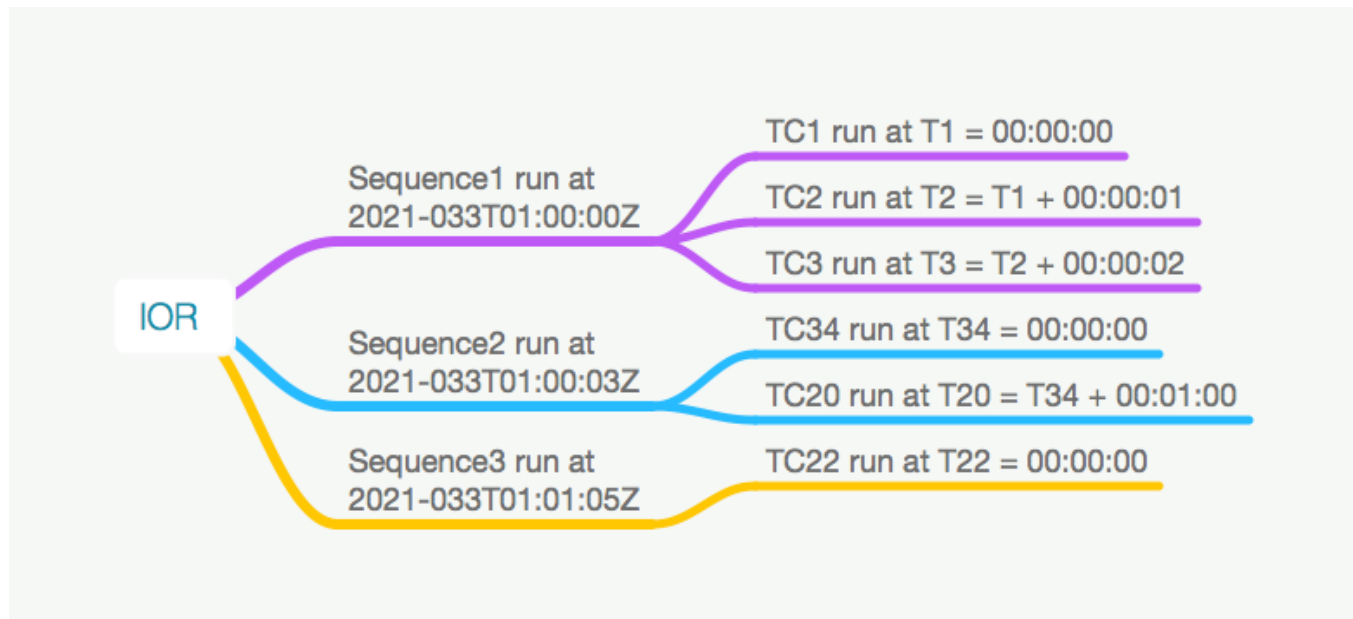
About the Operation Request concept to be used during the Solar Orbiter mission

## Operation Requests formats

Four format files are used to request operations for RPW:

- Flight procedures, described in [SOL-ESC-IF-10002\\_FOP-ICD](#)
- Instrument Operation Request (IOR), described in [SOL-SGS-ICD-0003\\_IOR-ICD](#)
- Payload Direct Operation Request (PDOR), described in [SOL-ESC-IF-05010\\_PLID](#)
- Memory Direct Operation Request (MDOR), described in [SOL-ESC-IF-05010\\_PLID](#)

Figure below gives an example of typical IOR hierarchical tree.



An IOR is an XML file containing a list of sequences sorted by increasing sequence execution time. The sequence execution time is an absolute time in UTC. A sequence is a list of TCs sorted in increasing TC execution times. As illustrated in the figure, the TC execution time values in a sequence must always be relative to the previous TC. Especially, the first TC execution time value in the sequence must always be 00:00:00. It results that a sequence is not absolute time-dependent, whereas a IOR is.

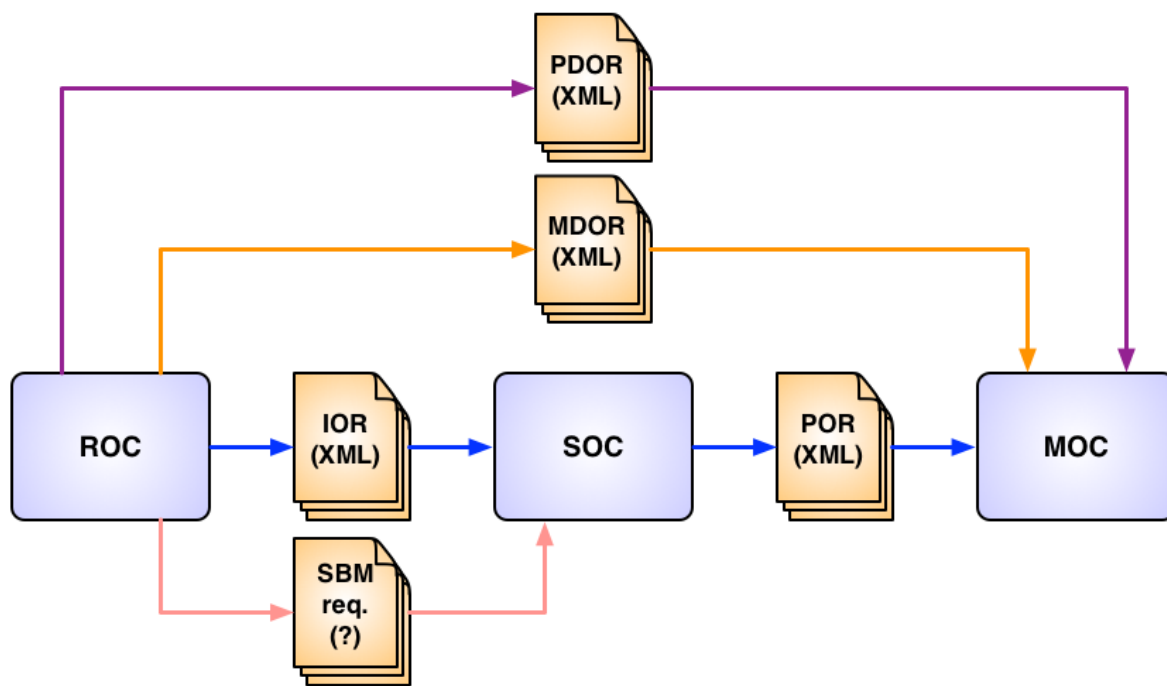
Note that:

- The PDOR/MDOR format files are also XML files with a quite similar hierarchical tree, but specific XML tag/attributes.
- Sequences are stored in Excel format files called (flight) procedures. In practice there is one sequence per procedure file.

## Operation Requests submission

Figure below presents the outgoing flow diagram concerning the RPW operation requests. Depending of the type of operations, routine or none routine, there are different ways to submit a request:

- For routine operations, the ROC must submit IOR to the SOC
- For routine operations related to the SBM event data selection, the ROC must submit TBD to the SOC
- For none routine operations, the ROC must submit PDOR to the MOC
- For none routine operations related to the on-board memory, the ROC must submit MDOR to the MOC



*Legend*

→ Routine operations, → Routine operations related to the SBM event data selection,  
→ None routine operations, → None routine operations related to memory