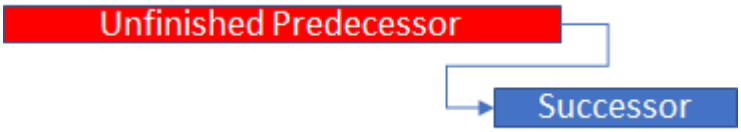
SSI Tools Test Method for DECM 06A212a
Are there out of sequence tasks/activities & milestones?

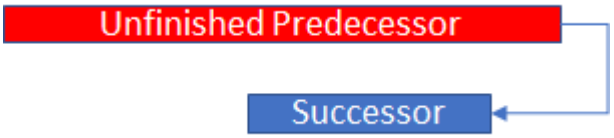
SSI Tools inspects predecessors of tasks and milestones and finds the following conditions according to the Dependency type:

If the predecessor task did not finish (P.AF = NA) then:

- If finish-to-start, the test identifies successor tasks/milestones that have an actual start date OR a forecast start date (S.AS or S.FS) before the predecessors forecast finish date (P.FF). Therefore: [(S.AS or S.FS) < P.FF]



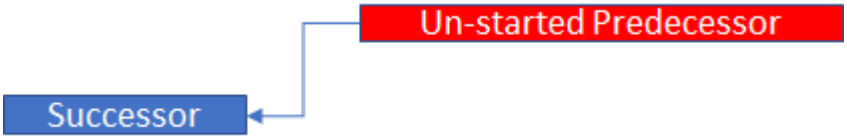
- If finish-to-finish, the test identifies successor tasks/milestones that have an actual finish date OR a forecast finish date (S.AF or S.FF) before the predecessor forecast finish date (P.FF). Therefore: [(S.AF or S.FF) < P.FF)]



If the predecessor task did not start (P.AS = NA) then:

- If the dependency is start-to-start, the test identifies successor tasks/milestones that have an actual start date OR a forecast start date (S.AS or S.FS) before the predecessor forecasted start date (P.FS). Therefore: [(S.AS or S.FS) < P.FS]

- If Start-to-finish, the test identifies successor tasks/milestones that have an actual finish date OR a forecast finish date (S.AF or S.FF) before the predecessor forecast start date (P.FS) Therefore: [(S.AF or S.FF) < P.FS]



If an out of sequence condition is caused by leads (negative lag) SSI reports these tasks as a finding. Projects must have adequate justification/rationale for this condition.

Setup Instructions using SSI *DECM Audits* form

No setup is required for this test other than the normal scheduling practice of allowing each task's schedule to be determined by its duration and its predecessors.

References from: EVMS Test Metric Specification

5. Attribute: 06A2: The network schedule/IMS depicts the sequence of work (horizontal integration) and identifies the significant interdependencies that are indicative of the actual way the work is planned and accomplished.

6. Test Step: Are there out of sequence tasks/activities & milestones?

7. Test Metric: X = Count of out of sequence conditions

8. Metric Threshold: X = 0

10. Data Elements Required:

11 Integrated Master Schedule

11A Actual Finish Date
11C Actual Start Date
11V Forecast Finish Date
11W Forecast Start Date
11AE Predecessor (Type)
11AK Successor (Type)
11AM Task/Milestone UIDs

11. Assumptions:

1. Many leads will cause an out of sequence condition.
2. S.AS: Successor Actual Start
3. S.AF: Successor Actual Finish
4. S.FS: Successor Forecast Start
5. S.FF: Successor Forecast Finish
6. P.AS: Predecessor Actual Start
7. P.FS: Predecessor Forecast Start
8. P.FF: Predecessor Forecast Finish

SSI Report

SSI Report shows the following headers referring to the DCMA EVMS Test Metric Specification

- Metric ID – Block 2 **Unique Test Metric ID**
- Name – Block 6 **Test Step**
- Metric Threshold – Block 8 **Metric Threshold**
- Numerator (X) – Block 8 **Metric Threshold** X Value
- Denominator (Y) – Block 8 **Metric Threshold** Y Value
- Score – Block 8 **Metric Threshold** X/Y Value
- Pass/Fail – Block 8 **Metric Threshold** X/Y Pass/Fail determination
- Metric Spec Link – Link to the **EVMS Test Metric Specification**
- SSI Test Link – Link to SSI Test method and description (this document)

SSI Report shows the following Details:

- **Unique ID** – Task Unique ID in Microsoft Project
- **Name** – Task Name in Microsoft Project
- **Out of Sequence –** shows Yes if the task is the successor having an out of sequence condition

Report Example

A	B	C	D	E	F	G	H	I
Metric ID	**Name**	**Metric Threshold**	**Numerator (X)**	**Denominator (Y)**	**Score**	**Pass/Fail**	**Metric Spec Link**	**SSI Test Link**
06A212a	**Are there out of sequence tasks/activities & milestones?**	**1%**	**1**	**87**	**1%**	**Fail**	DECM Spec	SSI Spec
Unique ID	**Name**	OutOfSequence						
115	Build Test Articles	Yes						