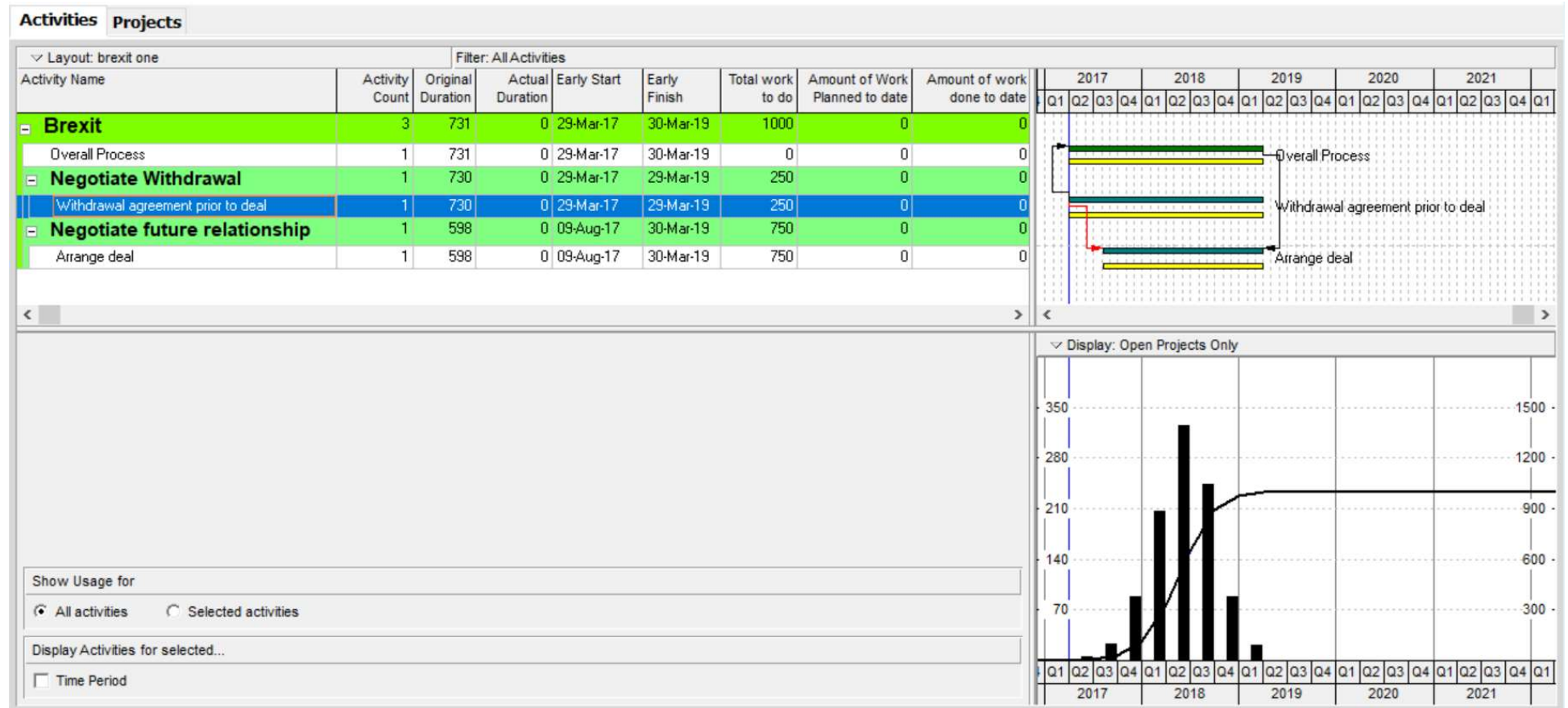


Project Brexit 30th October 2019

Examining the Brexit project with conventional tools, we get a picture before the project starts as below.

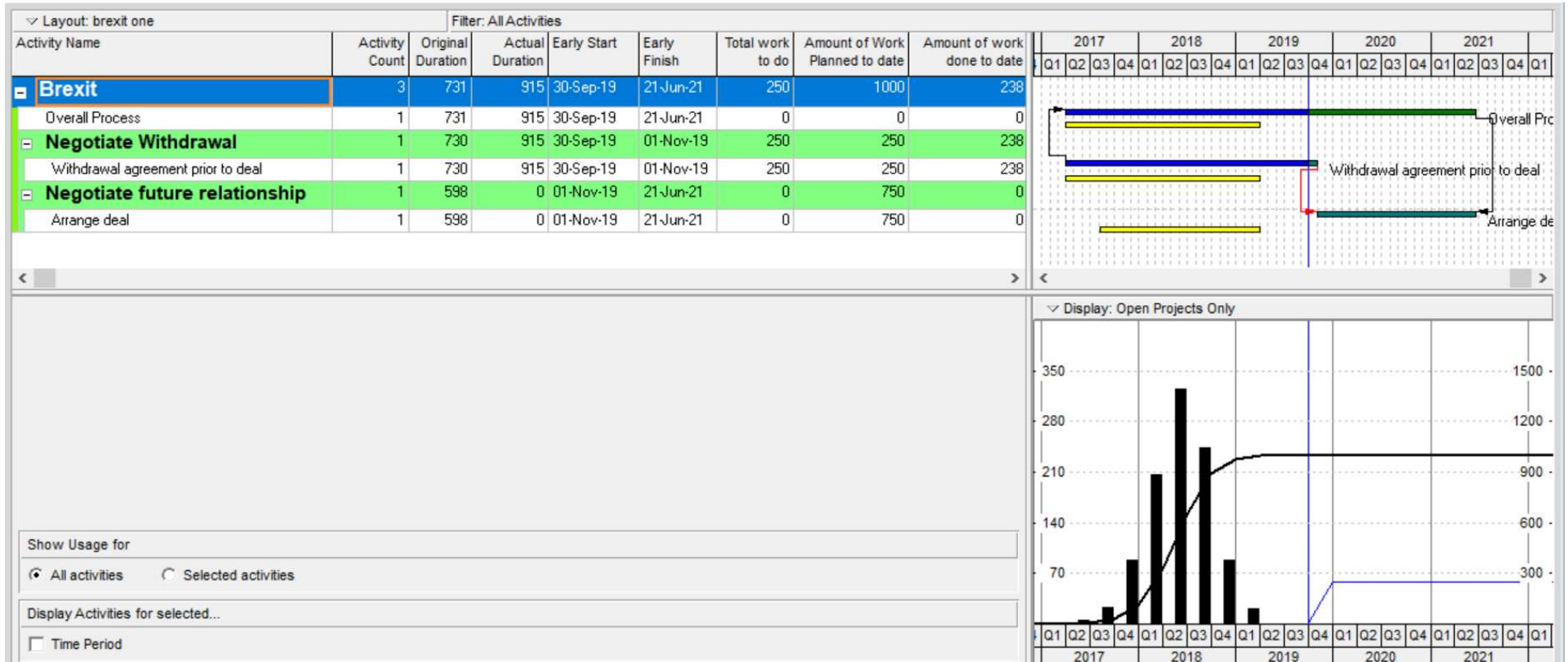


There are two branches only of the Work Breakdown Structure (WBS) identified – Negotiate Withdrawal and Negotiate Future relationship. These are the two phases of this project. In each of these we have identified only one activity. This outrageous lack of detail reflects the complete lack of a scope of work. The effort required to do these two tasks has been coded as 250 units for the withdrawal, and 750 for the future relationship. That is the future relationship is three times more effort than the withdrawal agreement. Other divisions of effort are simple to model. From all of my conversations, this would seem to be a very optimistic ratio – that is the phase two work scope is considerably more than three times the size of the phase one work scope according to most commentators. Note that with no formal estimation phase to this project, “comment” is the best we can do here.

Note that it was assumed that after a few months of work on the withdrawal, work on the future relationship would commence. This was the British government's original position. It also assumes that since no scope of work had been outlined, the liquidation of the work would follow a normal distribution, due to the difficulty of doing work that has not yet been defined and the effort involved in preparing a scope of work on the fly. This "shape" of work is the subject of another tutorial.

A lot has happened since the 29th of March 2017. The most important of this list from a project management perspective, is the removal from the current schedule of the whole of the negotiate future relationship WBS branch. In order not to lose sight of the whole scope of work, which must eventually be executed, rather than delete the activity from the schedule we remove its "scope of work" i.e. the 750 units of "stuff" that we allocated before we made the baseline. Next is the issue of concurrency. It is not now possible to do the two activities in parallel. We must complete withdrawal before we negotiate a deal, in consequence the relationship between the two activities is changed from a start-to-start with lag, to a conventional finish-to-start relationship. From a contractual AND forecasting perspective, this lack of concurrency is the worst possible case. We know nothing about the cancelled work, except that the "other side" will not talk about it. In order to forecast how long it might last, we only have the withdrawal phase to benchmark with. Anecdotally, we are told that this cancelled second phase will be more difficult, yet in our original project plan it occupied less time. We will forecast only on the basis of what is known, and not add anything for "degree of difficulty" in completing the undefined scope. This is VERY optimistic, as is the division of effort between the two phases.

So, at the 30th September 2019 we have:



In the above graph we see:

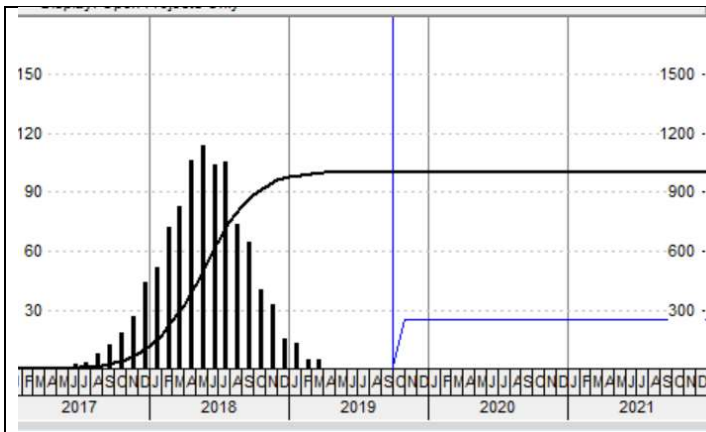
The yellow baseline bars in the bar chart area are unchanged. The current withdrawal bar finishes on the 31st of October, NOT because we have entered how much progress has been made – we have no measure for this – but simply because we have been told that activity stops then. Conventionally the original duration of the activity would have a percentage applied to it to reflect how much has been achieved, and a new date calculated based on that. The ONLY progress measure the contractor on this job (HM Government) has communicated is an “Expected Finish” date devoid of any actual measurement.

Note the three columns

| Total work to do | Amount of Work Planned to date | Amount of work done to date |
|------------------|--------------------------------|-----------------------------|
| 250 | 1000 | 0 |
| 0 | 0 | 0 |
| 250 | 250 | 0 |
| 250 | 250 | 0 |
| 0 | 750 | 0 |
| 0 | 750 | 0 |

The planned work remains 1000 units, but we scrapped three quarters of that when we removed negotiate a deal from the plan. We should have completed all 250 units that are shown in the new, revised "Total work to do" column, but at the moment at least we have not claimed any of those as done. We will revert to this shortly.

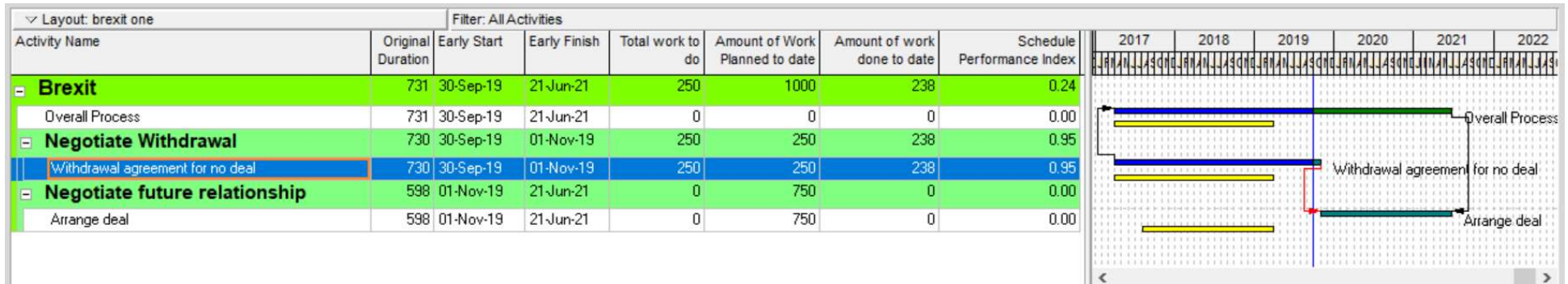
Addressing the chart



The blue vertical line is the data date (aka Time Now) the black "S" curve and histogram represent the baseline liquidation of scope with respect to time. The very simple blue line is our remaining scope of work – which is the unaltered 250 units of work we assigned to negotiate a withdrawal. How much of this is earned?

The conventional way to calculate earned value is to apply a percentage to the original budget. This percentage relates to how much of the scope has been achieved NOT, and I mean definitely NOT, how much time has been spent on the job. Another complexity is the concept of "Nothing is agreed until everything is agreed" in our language that means a 0/100 EV algorithm. We earn nothing from each activity until it is signed off and complete. A not unreasonable way to do Earned Value arithmetic when, say, each of a thousand drawings to be complete is an activity – but when the entire WBS element is only a single activity it is pretty horrible way to forecast. We need to ascribe some value to the work done or we have no basis for forecasting.

We need to describe the progress through the withdrawal agreement activity. We will assume 95% of the work has actually been done.



The above screenshot shows that we have done 238 units of the 250 scheduled to be done. This represents about 24% of the overall work of the schedule, and 95% of the work in the WBS “Negotiate Withdrawal”.

Note that Schedule Performance Index (SPI) always “ends” at 1.00. No matter how late the schedule is, when we have done all of the work that we planned we have done 1.00 of it. So, SPI has important restrictions. Had we simply removed the Negotiate Future Relationship from the plan, an overall SPI of .95 might not have scared us.

Let us consider SPI(t) aka “Earned Schedule”. This metric is not, yet, an integral part of the Project Management Institutes Earned Value analysis core metrics, it should be. Most software tools do not consider it. So, we shall have to do the sums by hand!

Original duration of Project 730 days

Original Scope of work 1000 units

At 30th October, duration is 915 days

Percentage of work done 24%

Forecast length of Project $915/24 \times 100/365$ **Ten and a half years.**

The above arithmetic is not complex. This is largely due to the spectacular simplification of the scope of work in our withdrawal phase to a single activity.

In the event of us leaving the EU on the 31st of October, current HM government policy on this project would seem to be to plunge into it without any planning. This means that no forecast more rigorous than the one outlined above will be possible any time in the next phase.

Several optimistic views were taken to produce the estimate of 10.5 years. In any job of this size we would expect percentiles for time and cost at completion from a formal risk assessment. This is just not possible here. While risk assessment is often “fudged” when we have insufficient data, the message from what we know about this job is crucially “we know nothing”. If 10.5 years is P10, and I suspect it is, then I expect P90 is in the order of twice that. Why we cannot risk assess this project is the subject of another tutorial.

On the bright side, I am semi-retired and have no children. So this bin fire will not affect me that much.

Stop Press. As of 29/10/31 it now looks that the EU withdrawal agreement will now not activate until 31/1/20. That is a delay of a further 92 days. So, the arithmetic is now:

| | | |
|--|-------------------|---------------------------------|
| Original duration of Project | 730 days | |
| Original Scope of work | 1000 units | |
| At 30 th October, duration is | 1007 days | |
| Percentage of work done | 24% | |
| Forecast length of Project | $1007/24*100/365$ | eleven and a half years. |