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Empowering Process Automation

eDiary

How To Build A Business Process Online, Before You've Had Lunch!

A diary of how I built and tested a process in 4 hours

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FlowForma

Summer 2019

Challenge Set!

Hi there

Thanks for downloading my first eDiary! Hopefully the first of many to come. I hope you enjoy the read and get inspired to set your own Process challenge!

I recently came back from a conference, at which I shared insights into the lightening speed that the FlowForma Process Automation tool enables users to prototype, test and ultimately launch their own business Processes in hours, with no coding required! It's true...

But to prove it's really possible and practice what I preach, I set myself a pretty tough challenge to build out a rather complex Process with decision making functionality, all in one morning.

So that's the inspiration for my eDiary, a diary of how I built a complex Process from end-to-end, including voting buttons... I'll let you read on to discover how long it took.

Oh I forgot to mention, the Process I chose was the ever challenging nightmare for organizations... the Tender Process!

At a high level this would involve, capturing the details of a project, approval of the Tender, a sub Process for the scoring of each Proposal and then a Proposal award step.

Ok, let's jump right in...

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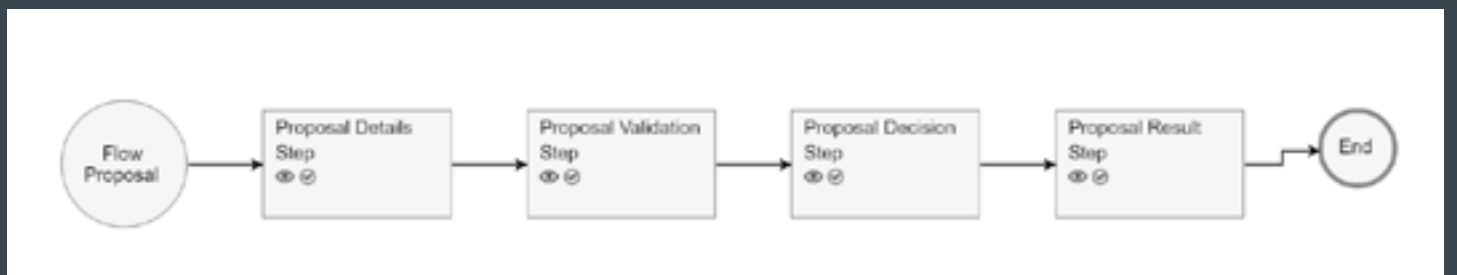
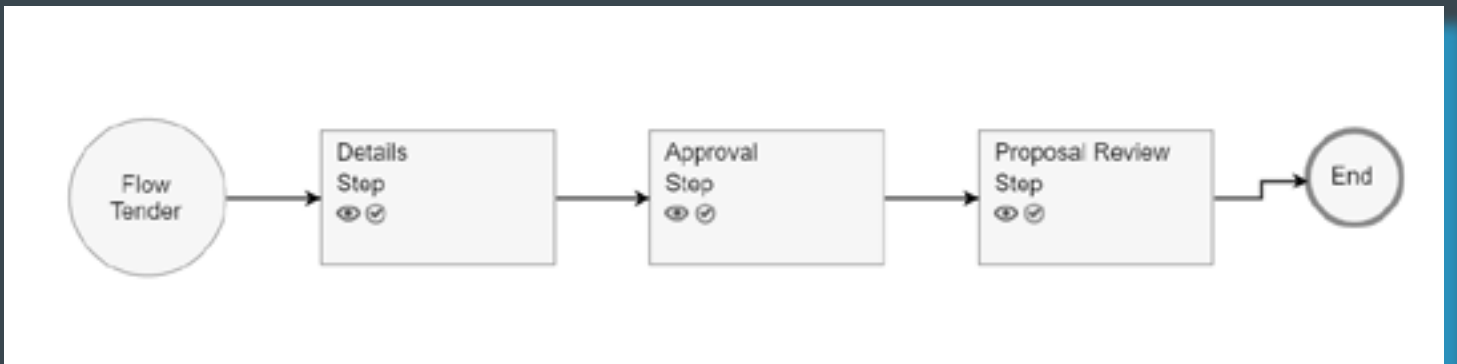


So What's Involved?

Before you read through my Process building e-diary, let me share with you, what this Process involves:

1. capturing the details of a project
2. approval of the Tender
3. a sub Process for the scoring of each Proposal
4. a Proposal award step

The following screenshots are from our Visual Flow Designer to show the high level steps.



Getting Started...

09:00: Kickstarting the Process

Ok, so it's 9.00am, I've had a catch up with our R&D team and my much needed morning coffee has kicked in. First task is to start building the Tender Process, which in this case consists of three steps:

- details
- approval
- Proposal review

Creating this Process only takes me 30 minutes, I simply create the steps and questions. I won't worry about the rules until later.

The screenshot shows a 'Tender' form with a multi-step navigation bar at the top containing 'DETAILS STEP NO.1', 'APPROVAL STEP NO.2', and 'PROPOSAL REVIEW STEP NO.3'. The main content area includes a 'Paragraph' field with a rich text editor toolbar and the text 'SINGLE SUPPLIER FRAMEWORK CONTRACT for the Provision of Testing Framework'. Below this are 'Published Date' (21/01/2017 09:00:00) and 'Close Date' (30/01/2017 09:00:00) fields with calendar icons. A 'Tender Document' field contains a link 'RT Details.docx' and 'Delete' and 'Replace' buttons. At the bottom are 'Save', 'Submit', and 'Close' buttons.

9.30: Creating the Proposal Process

To make this challenge more exciting, I've decided to enable decision making within the Process. So I first create four steps and add the basic questions on each step. Again I did not implement any rules as I wanted to keep going at a high level.



The screenshot shows a 'Forms - New Item' window for a 'Proposal' form. It has a four-step navigation bar: 'PROPOSAL DETAILS STEP NO.1', 'PROPOSAL APPROVAL STEP NO.2', 'PROPOSAL DECISION STEP NO.3', and 'PROPOSAL RESULT STEP NO.4'. The form fields include 'Tender Code' (TEN-33), 'Contact' (John Smith), 'Company Name' (Contoso), 'Contact Number' (011234567), and 'Contact Email' (John.Smith@contoso.com). At the bottom are 'Save', 'Submit', and 'Close' buttons.

Enabling Voting...

10:30: Adding Voting

As with all Tender Processes, each Proposal needs to be evaluated and marked by a panel. Like the majority of Proposals, the Tender template I chose has weighted scores for each section.

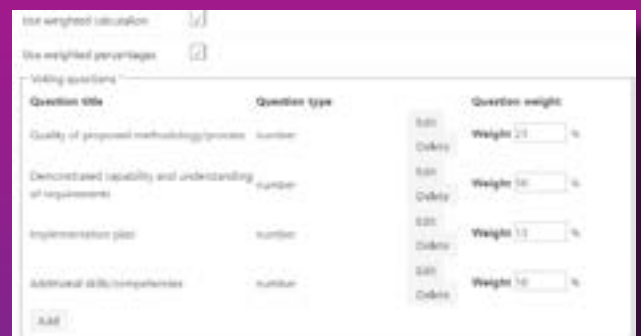
It's 10.30am, my next task is to translate these scores into my Proposal and also figure out how I'm going to calculate the costings. I decide to keep the scoring of the costing section separate to the marking Process, as until all Proposals are received, the end user cannot enter the 'Lowest Cost Proposal'. This is required to automatically calculate the Cost Score.

Award Criteria	Score
Project methodology	125
Understanding of requirements	250
Implementation plan	175
Additional skills/competencies	100
Total cost	500
Calculating cost score	$500 * A / B$

*A = lowest Proposal cost, B = Proposal being marked cost

Knowing that the decision Process is based out of a score of 500, I decide to make it easier on the end user and have them score each section from 1-100, letting the back-end do the weighting calculations. I simply calculate what each section is as a percentage against the overall score. The screenshot here shows how this is configured as part of the costing section, separate to the marking Process. This is required to automatically calculate the Cost Score.

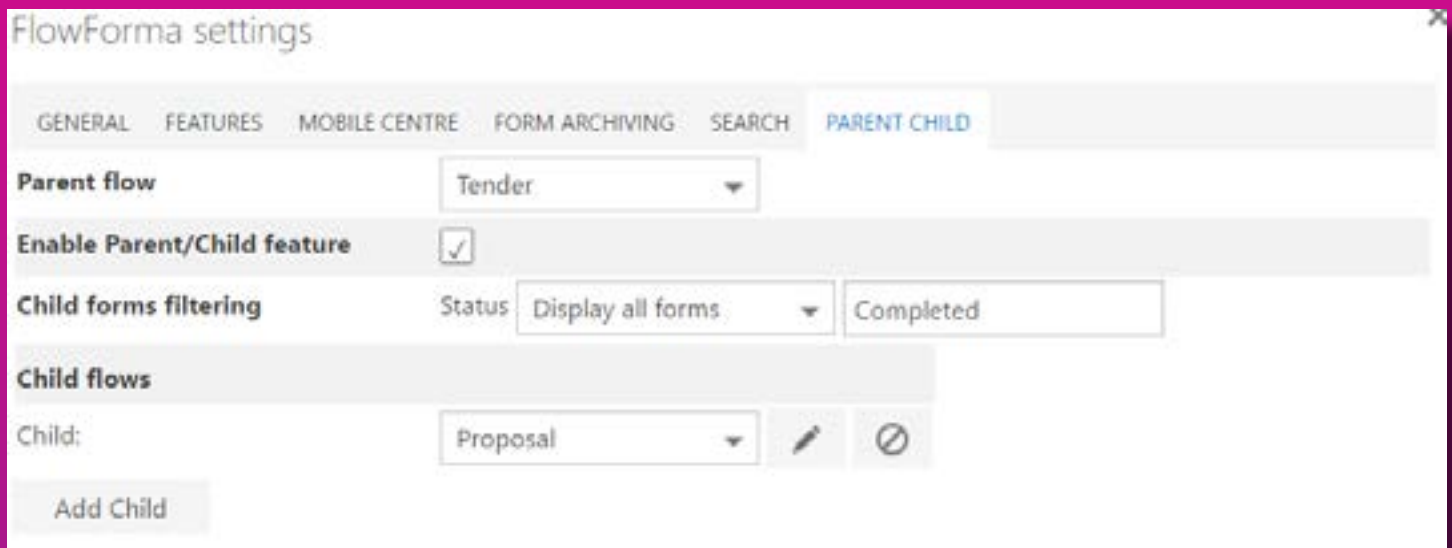
This is my favourite feature of the FlowForma Process Automation tool!



Connecting the Steps...

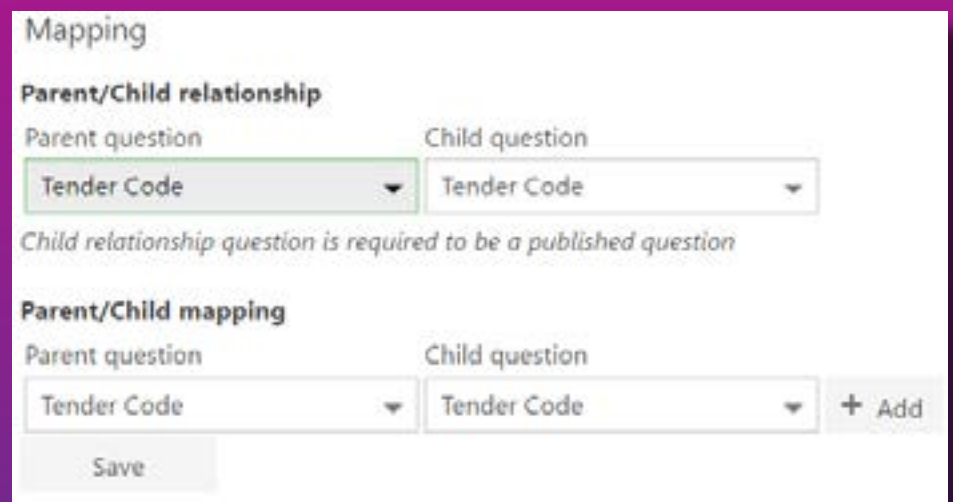
11:00: Using Parent Child Functionality

Now that I have both Process steps built out, I now need to connect them, so that Proposals are related to Tenders. I quickly do this, using the Parent Child functionality, firstly I create a Tender ID as a question in both Processes, then I open the Parent Child settings and configure the relationship. I set Tender as the Parent Process, I then set Proposal as the child Process. Simple!



The screenshot shows the 'FlowForma settings' interface with the 'PARENT CHILD' tab selected. The 'Parent flow' is set to 'Tender'. The 'Enable Parent/Child feature' checkbox is checked. Under 'Child forms filtering', the status is set to 'Completed'. In the 'Child flows' section, 'Proposal' is selected as the child process. An 'Add Child' button is visible at the bottom left.

Ok so here, I select the child Process, I then go into the Child settings and pick the Tender code from both forms. I also set the mapping for when a new Proposal is created, that the Tender code will automatically pull from the Parent.



The screenshot shows the 'Mapping' configuration screen. Under 'Parent/Child relationship', both 'Parent question' and 'Child question' are set to 'Tender Code'. A note states: 'Child relationship question is required to be a published question'. Under 'Parent/Child mapping', both 'Parent question' and 'Child question' are also set to 'Tender Code'. There is an '+ Add' button and a 'Save' button at the bottom.

Making It Easier for the User

11:30: Adding Simplicity for the End User

I'm all about end user buy-in and adoption, so here I'm going to add some details to make everything easier for the end user. I go back into the Proposal Process and set the Tender code to be a disabled question, as I only ever want this to be auto-populated. Now that my Proposals are being submitted to me via email etc. I want to make filling in the Proposal information a little easier, most likely I will have a CRM of some kind with the details of the companies, I have issued the Tender to. So next, I configure the Proposal to have a drop down question which reads from my contacts stored in CRM. Once I select the contact name, the contact details should all be pulled in and mapped to the form.

Rule actions

Operation

- Add item
- Update item
- Get item
- Delete item

Server *

CRM user name *

Password *

Connection

Entity sets *

Entity id question *

Output mappings

Form value *

CRM value *

And finally I need to empower the Process Owner to calculate the overall Tender winner, by taking in the lowest cost Proposal. To do this, I am going to use a repeating table to calculate all Proposals at the same time and give an overall score.

Number of rows displayed *

+ Add sub-question + Add existing sub-question *

Table template

"Proposal" title ✕	"Award Scoring" title ✕	"Total Cost" title ✕	"Cost Score" title ✕
"Proposal" placeholder ✎	"Award Scoring" placeholder ✎	"Total Cost" placeholder ✎	"Cost Score" placeholder ✎

My screenshot below shows the configuration of the calculated score based on the lowest score received.

The screenshot shows a configuration window for a calculated score. It includes the following fields and options:

- Calculated format:** A dropdown menu set to "Number".
- Decimal places:** A numeric input field set to "0".
- Search questions:** An empty text input field.
- Available questions:** A list of questions with a scrollable dropdown menu. The selected item is "Ultimate Cost from lowest submission - {step3.1}". Other items include "Tender Code - {step1.5}", "Proposal Scoring - Proposal - {step3.2[step3.2.6]}", "Proposal Scoring - Award Scoring - {step3.2[step3.2.1]}", "Proposal Scoring - Total Cost - {step3.2[step3.2.2]}", "Proposal Scoring - Total Score - {step3.2[step3.2.4]}", and "Proposal Scoring - Award Tender - {step3.2[step3.2.5]}". An "Add" button is located to the right of the list.
- Expression *:** A text input field containing the formula $(500 * \{step3.1\}) / \{step3.2[step3.2.2]\}$.
- Buttons:** "Clear" and "Validate" buttons are located at the bottom of the configuration area.

I also want to auto-populate the repeating table when the step loads, for this I will configure a rule to look up the Child forms and populate the repeating table. In the screenshot below you can see, I have filtered the list based on my Tender code and also the Flow Title to Proposal.

The screenshot shows the configuration for a rule that auto-populates a repeating table. The configuration includes:

- Title *:** "Get list data".
- Event:** "Starting".
- Rule condition(s):** A section indicating "There are no conditions defined" with "Edit conditions" and "Clear conditions" buttons.
- Rule actions:**
 - Select list *:** "Forms".
 - Use filtering:** A checked checkbox.
 - List filtering:** A table with two rows:

List field	Condition	Question / Value
Tender Code	Equals	Tender Code
Flow Title	Equals	Proposal
 - Map repeating table:** A checked checkbox and a dropdown menu set to "Proposal Scoring".
 - Mapping Type:** Radio buttons for "Append" and "Overwrite", with "Overwrite" selected.
 - Target question * / List field *:** A table with three rows:

Target question *	List field *
Total Cost	Ultimate Cost for su...
Proposal	Flow Title
Award Scoring	Score

12:30: Configuration Done

Ok so it's now 12.30pm that's all the configuration done, I told you it was easy! Now let's go see what the Process actually looks like.

I'll spend the next half hour testing the process, and then I can enjoy some lunch!

Time to Review...

Step 1: Create a New Tender, Fill in the Details Required and Click Submit

Ok so that's all the configuration done. Let's see what the Process actually looks like.

The screenshot shows the 'Tender #45' details page. At the top, there are three tabs: 'DETAILS STEP NO 1' (active), 'APPROVAL STEP NO 2', and 'PROPOSAL REVIEW STEP NO 3'. Below the tabs is a rich text editor with a 'Format' dropdown and various icons for bold, italic, underline, bulleted list, numbered list, link, unlink, and table. The text in the editor reads 'New tender for end user BPM software.'. Below the editor, there are two date pickers: 'Published Date *' set to '02/04/2017 00:00:00' and 'Close Date *' set to '31/05/2017 00:00:00'. Below the dates is a 'Tender Document *' field containing 'BPM Software Requirements .docx', with 'Delete' and 'Replace' buttons. A note at the bottom left says '* Required'.

Step 2: Approve the Tender

The screenshot shows the 'Tender #45' approval page. At the top, there are three tabs: 'DETAILS STEP NO 1', 'APPROVAL STEP NO 2' (active), and 'PROPOSAL REVIEW STEP NO 3'. Below the tabs is a form with a label 'Approve Tender *' and two radio buttons: 'Yes' (selected) and 'No'. A note at the bottom left says '* Required'.

Step 3: Add a Proposal

Click the add Child form button, to open the Proposal Process.

Tender #45

DETAILS STEP NO 1	APPROVAL STEP NO 2	PROPOSAL REVIEW STEP NO 3
----------------------	-----------------------	------------------------------

Summary
Published Date * 02/04/2017 00:00:00
Close Date * 31/05/2017 00:00:00
Tender Document * BPM Software Requirements .docx
* Required

New tender for end user BPM software.

Child flows
Proposal

↑ Edit Master Form

TITLE	FLOW NAME	STATUS

Step 4: Enter the Proposal Companies Details

Simply start typing the persons first-name and look them up from CRM. The rule to pull the data will do the rest.

Proposal

PROPOSAL DETAILS STEP NO 1	PROPOSAL VALIDATION STEP NO 2	PROPOSAL DECISION STEP NO 3	PROPOSAL RESULT STEP NO 4
----------------------------------	-------------------------------------	-----------------------------------	------------------------------

Tender Code * TEN - 45

Contact John Smith

Company Name Contoso

Contact Number 011234567

Contact Email John.Smith@contoso.cor

Step 5: Validate Proposal Minimum Requirements

Here we identify the minimum requirements of the proposal.

Proposal #46

PROPOSAL DETAILS STEP NO 1	PROPOSAL VALIDATION STEP NO 2	PROPOSAL DECISION STEP NO 3	PROPOSAL RESULT STEP NO 4
-------------------------------	----------------------------------	--------------------------------	------------------------------

Economic and Financial Standing * Yes No

Technical and Professional Ability * Yes No

Proposal Overall Compliant * Yes No

* Required

Save Submit Delegate Pass back Close

Step 6: Score the Proposal

Enter the Cost of the Proposal and vote on each of the Proposal sections.

Proposal #46

PROPOSAL DETAILS STEP NO 1	PROPOSAL VALIDATION STEP NO 2	PROPOSAL DECISION STEP NO 3	PROPOSAL RESULT STEP NO 4
-------------------------------	----------------------------------	--------------------------------	------------------------------

Ultimate Cost for submission being considered * €12500.00

Proposal Marks

Quality of proposed methodology/process	95
Demonstrated capability and understanding of requirements	80
Implementation plan	90
Additional skills/competencies	50

Submit vote

Vote administration

Start vote
Finish vote
Cancel vote
Reset vote

Vote history
Related content
Team members

Enter your password to validate your score submission.

PROPOSAL
DETAILS
STEP NO 1

PROPOSAL
VALIDATION
STEP NO 2

PROPOSAL
DECISION
STEP NO 3

PROPOSAL RESULT
STEP NO 4

Ultimate Cost for submission being considered *

Proposal Marks

Your decision:

Quality of proposed methodology/process	95
Demonstrated capability and understanding of requirements	80
Implementation plan	90
Additional skills/competencies	50

User name

Password

Sign to vote
 Cancel

* Required

Comments ▼

Vote administration ▼

Vote history ▼

Related content ▼

Team members ▲

Anna Adamska

Luke Kennedy

Rytis Daskevicius

Step 7: View Scoring Results

Repeat the last 3 steps for each additional Proposal.

Proposal #35

PROPOSAL
DETAILS
STEP NO 1

PROPOSAL
VALIDATION
STEP NO 2

PROPOSAL
DECISION
STEP NO 3

PROPOSAL RESULT
STEP NO 4

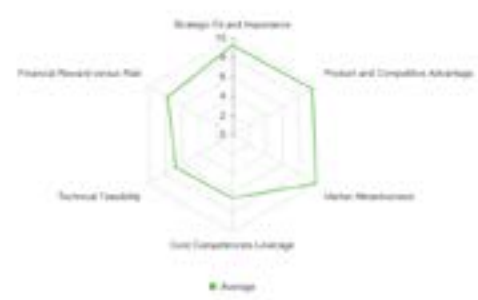
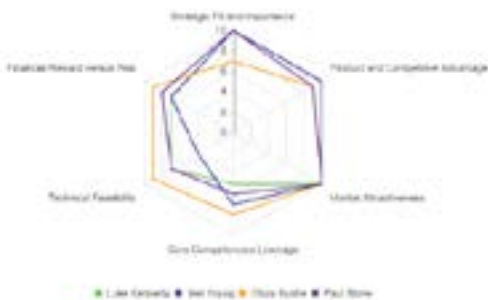
Weighted result: 51.43

Name	Quality of proposed methodology/process	Demonstrated capability and understanding of requirements	Implementation plan	Additional skills/competencies
Luke Kennedy	85	75	90	50
Rytis Daskevicius	8	11	14	50

Name	Quality of proposed methodology/process	Demonstrated capability and understanding of requirements	Implementation plan	Additional skills/competencies
Luke Kennedy	85	75	90	50
Rytis Daskevicius	8	11	14	50

Other graph options available:

Name	Experience	Geography	Support	Cost
Luke Kennedy	10	10	10	5
Neil Young	10	10	10	7
Olivia Bushe	7	9	10	8
Paul Stone	10	9	10	6



Step 8: Award Proposal

Once all Proposals are submitted open the Tender Process.

Tender #45

DETAILS STEP NO 1 **APPROVAL STEP NO 2** PROPOSAL REVIEW STEP NO 3

Approve Tender * Yes

* Required

[Edit Master Form](#) [Add New Child Form](#)

TITLE	FLOW NAME	STATUS	ASSIGNED TO
PROB4	Proposal	Completed	Luke Kennedy
PROBCT	Proposal	Completed	Luke Kennedy
PROBNS	Proposal	Completed	Luke Kennedy

1 / 3 of 3 items

The Proposal Processes will be pulled in automatically and displayed in the repeating table.

Tender #45

DETAILS STEP NO 1 APPROVAL STEP NO 2 PROPOSAL REVIEW STEP NO 3

Tender Code * TEN - 45

Ultimate Cost from lowest submission [dropdown]

Proposal	Award Scoring	Total Cost	Cost Score	Total Score	Award Tender *
PRD46	75	€12500.00		38	<input type="radio"/> Yes * <input type="radio"/> No X
PRD47	50	€10000.00		25	<input type="radio"/> Yes * <input type="radio"/> No X
PRD48	80	€15000.00		40	<input type="radio"/> Yes * <input type="radio"/> No X

+ add new proposal

* Required

Save Submit Delegate Pass back Close

Once the Lowest Cost Proposal is entered the final score for each Proposal will generate.

Tender #45

DETAILS STEP NO 1 APPROVAL STEP NO 2 PROPOSAL REVIEW STEP NO 3

Tender Code * TEN - 45

Ultimate Cost from lowest submission €10000.00

Proposal	Award Scoring	Total Cost	Cost Score	Total Score	Award Tender *
PRD46	750	€12500.00	400	375	<input type="radio"/> Yes * <input checked="" type="radio"/> No X
PRD47	850	€10000.00	500	525	<input checked="" type="radio"/> Yes * <input type="radio"/> No X
PRD48	825	€15000.00	331	348	<input type="radio"/> Yes * <input checked="" type="radio"/> No X

+ add new proposal

* Required

Save Submit Delegate Pass back Close

Challenge completed in 4 hours!
Why not set me a new Process
challenge via Twitter @FlowForma



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