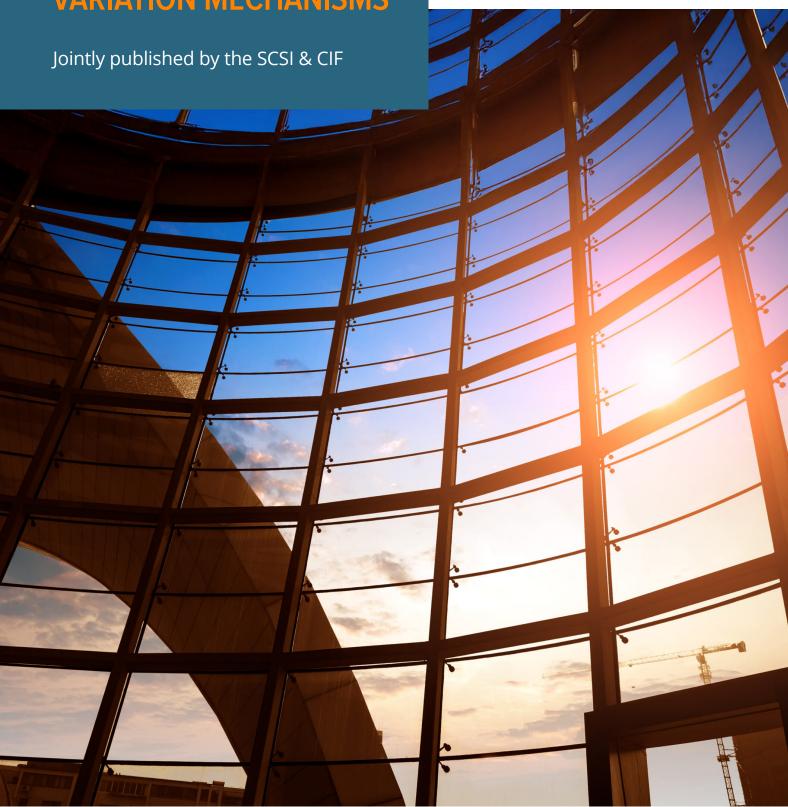




PUBLIC WORKS
CONTRACT PRICE
VARIATION MECHANISMS



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#### \*Important Note:

The examples are specific to actual projects within these types and do not apply to all projects within these categories. The purpose of the examples is to illustrate and help guide consultants in the exercise of proportioning materials and their individual weightings based on the particular project design and other relevant considerations and should not be used as a standard or ranges for future projects.

## Section 1 Introduction

The new clauses and mechanisms for Price Variation with the Public Works Contracts apply to tenders and contracts received on or after 27 July 2023 (27th July being the date 10 days after the date of publication of the amendments, disregarding the day of publication).

The new mechanism removes the Fixed Price Period for materials and fuel with the contractual right to recover inflationary costs from the Designated Date throughout the duration of the contract. The calculation of inflationary costs will be done using indexed formulas reliant on the Wholesale Price Indices (WPI) from the Central Statistics Office (CSO) Table 3. The new mechanism also introduces a Permitted Increase Threshold above which the contractor is entitled to recover costs.

For the new mechanisms to work the consultants are required to complete a number of documents during the pre-tender stage setting out the proportions of materials, fuel, labour, plant and non-adjustable overheads for the specific project. They will also be required to select the Permitted Increase Threshold which should be appropriate to the nature of the project or left at the default of 5%.

There is also a requirement for them to breakdown and insert the weightings of individual material categories contained within the material proportion into appendices 4 and 5 of the FTS and also in the new OGP developed workbooks.

Further details on the new mechanisms are outlined below. The CIF has also provided specific worked examples of completed appendices and workbooks for the following project types:

- Healthcare Facility
- Housing
- Commercial: Office
- Industrial: Warehouse
- Education Facility

#### **Important Note:**

The examples are specific to actual projects within these types and do not apply to all projects within these categories. The purpose of the examples is to illustrate and help guide consultants in the exercise of proportioning materials and their individual weightings based on the particular project design and other relevant considerations and should not be used as a standard or ranges for future projects.

For clarity, the Guidance and Information provided by the Office of Government Procurement takes precedence over the content of this document.

## Section 2

### Overview of the New Mechanism

This is a contractual entitlement and is not provided at the discretion of the ER/Employer. The recovery of costs under the new mechanism is not a "claim" but an automatic entitlement which forms part of the payment schedule. Some of the important parts of the mechanism that consultant should be aware of are:

- 1. Contractors will be entitled to material/fuel cost increases above the threshold for the entirety of the project.
- 2. Most of the work will be completed by the consultant at design and tender stage:
  - a. They will be responsible for completing the FTS, appendices 4 and 5 and inserting the WPI from the CSO Table 3
  - b. The consultants will also be responsible for setting up the workbook that calculates the costs related to inflation that the contractor is entitled to.
- 3. The OGP have developed standardised excel workbooks made up of 5 inter-related parts.
  - a. Summary Tab this will collate all the calculations and provide monetary value.
  - **b. Appendices 4 and 5 Tab –** This is where the proportions of materials, fuel and labour will be entered by the consultant. The weights for specific categories/sub-categories of materials, fuel and labour will be entered also by the consultant.
  - **c. Permitted Increase Threshold** (PIT) The employer will also select the appropriate PIT for the Project, but the default is 5%.
  - **d. Indices** this is where the consultant will copy the CSO WPI from Table 3 directly into the workbook cells.
  - **e. Materials –** The main entries here are the payment claim value for each month and the effective value of materials. The effective value is an amount less the exempted amounts set out in the contract.
  - **f. Fuel** no further entries are required in this sheet. The Consumer Price Index (CPI) is used for electricity.
- 4. The material categories reflect all material categories and sub-categories in the CSO WPI Table 3 Applies to CW-F1 to 5.
- 5. CW-F6 will use 11 categories only, however the option is to use all if there is no BoQ.
- 6. Recovery of inflation costs will be one month in arrears due to the publications of indices.

- 7. The relevant dates are:
  - a. Designated Dates (2 week before tender submission main base indices date)
  - b. Recovery Date (comes into play if the contractor has delayed the commencement)
  - c. Adjustment date (month of payment claim)

These should be entered by the consultant into the workbooks.

- 8. The threshold is determined by the following factors:
  - a. Size and complexity of project
  - b. Duration
  - c. Types of materials and their price volatility
  - d. Quantity of material
- 9. The Form of Tender and Schedule will set out the weightings, proportions of material/fuel/labour and the threshold.
- 10. The OGP have developed a detailed illustrated guidance document to accompany the mechanisms, which is available on the OGPs website under Cost Planning Control under Pillar Three.

## Section 3

# Key Elements that require consideration by the consultant and contractor:

- Ensure all parties to the contract are aware that they are tendering under the correct contract. If not, where appropriate, it is recommended to inform the Contracting Authority that the new forms of contract should be used. This should be done during the tender process on eTenders.
- If the Permitted Increase Threshold is set at a level e.g. 10% and where it is considered that the contract is of sufficient complexity and duration as to require a lower threshold, this should be raised with the Contracting Authority by the consultant pre-tender or by the contractor during the tender stage on eTenders.
- If the proportions and weightings set out in Appendix 4 and 5 of the FTS are incomplete or are considered not to accurately reflect what would be considered proper settings for a particular type of project, again these this should be raised with the Contracting Authority by the consultant pre-tender or by the contractor during the tender stage on eTenders.
- The consultants and contractor should ensure that labour proportions and weightings are included to ensure that they get their entitlement when the fixed price period ends for labour costs.
- The consultants must fully complete all categories/sub-categories/sub-subcategories of materials/fuel/ labour – this is to ensure that more volatile materials are captured in the overall calculation of costs increases under a material category.
- The ER, consultants and contractors should ensure that they engage as early as practicable after contract award with the ER to agree on the definition of excluded amounts set out in clause 15.7.
- All parties should be aware that the mechanism also allows the Contracting Authority to recover costs on a material or fuel decrease if they decrease by more than 10%.

## Section 4 Introduction

#### **Section 4 Resources:**

An extensive set of resources is available at the following links:

- 1. The joint OGP, CIF and SCSI Webinar on the Price Variation Mechanism located on the CIF's Contracting Resource Hub here: <u>Learning & Development Resources Construction Industry Federation (cif.ie)</u>
- 2. The OGP's website located here: <a href="https://constructionprocurement.gov.ie/standard-forms-for-cost-planning-cost-control/">https://constructionprocurement.gov.ie/standard-forms-for-cost-planning-cost-control/</a>
- 3. The OGP guide on how to use the Price Variation Workbooks PV.1.0 V1.0, also located at the link above.

## Section 5

# Specific Examples of Completed Appendices and Workbooks

This section provides detailed specific examples of completed appendices 4 and 5 along with the associated sections of the workbooks related to materials and fuel, again, for specific projects. These are specific examples of projects constructed in the following categories:

- 1. Healthcare Facility
- 2. Housing Projects:
  - a. ICF
  - b. Timber Frame
  - c. Block
- 3. Commercial Office
- 4. Industrial Warehouse
- 5. Education Facility

#### **Important Note:**

The examples are specific to actual projects within these types and do not apply to all projects within these categories. The purpose of the examples is to illustrate and help guide consultants in the exercise of proportioning materials and their individual weightings based on the particular project design and other relevant considerations and should not be used as a standard or ranges for future projects.

#### 5.1 - How the examples work

For each construction category there is a specific project. Each project is provided with a narrative outlining specific details related to its location, value, construction type and anything specific about the design which may have an impact on the materials used to construct it.

A worked example is then provided illustrating how Appendix 4, 5 Part 1 and 5 Part 2 is completed. Finally illustrated examples provided show how the materials and fuel tabs in the excel workbooks developed by the OGP are completed.

#### 5.2 - Notes on completing the Appendices and Workbooks

#### 5.2.1 Appendix 4

This appendix requires the consultant to insert the proportions within the project for materials, fuel, labour, plant and non-adjustable overheads. The consultant will also be required to select the Permitted Increase Threshold (PIT) based on the complexity, duration, supply chain volatility and value of the contract.

Appendix 4 is built into the excel workbooks and once completed will automatically complete the relevant fields in the other tabs within the workbook. The consultant can then copy the figures into the section of the Form of Tender and Schedule with contains the Appendix 4.

When completing this appendix the consultant should consider the following:

- 1. Ensure that all fields are given a value, so the total value adds up to "100%".
- 2. The consultant should take care to select the most appropriate PIT that fairly reflects the contractual risk for both the client and contractor to achieve the optimal transfer of inflation risk and for the contract to remain commercially viable.

#### 5.2.2 Appendix 5 Parts 1 and 2

Appendix 5 Part 1 requires the consultant to insert the material weightings for all material categories contained within the overall proportion of materials inserted in appendix 4. It also facilitates the insertion of individual weightings for material sub-categories to allow the capture of inflationary increases associated with more volatile materials that make up the main categories.

Appendix 5 Part 2 requires the consultant to enter weightings for Fuel Oil, Diesel and Electricity.

Again, both parts of Appendix 5 are built into the excel workbooks and once completed will automatically complete the relevant fields in the other tabs within the workbook. The consultant can then copy the figures into the section of the Form of Tender and Schedule with contains the Appendix 4.

When completing appendix 5 Parts 1 and 2, the consultant should consider the following:

- 1. Ensure that all fields (Material and Fuel) are given a value, so the total value adds up to "100%".
- 2. If sub-categories are used, then all sub-category fields must be completed in full. None can be left out. This is to ensure that the correct weighting is summated for inclusion in the workbook for the main material based on its sub-categories and will then capture any volatility in material components.

#### 5.3 Healthcare Facility

**Location:** Regional Project – Based in Midlands

**Approx. Value:** €21M

**Project Overview:** New 50 Bed Community Nursing Unit including all siteworks.

#### **Project Description**

The project is located in the Midlands on an existing HSE campus and the works involve the construction of a new 50 bed Community Nursing Unit including all associated sitework and 250m2 refurbishment in existing buildings. Overall floor area of 4200m2. Works include demolition of existing structures and diversion of existing site services.

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The structure is a 2 storey in-situ concrete frame sitting on piled foundations with a mix of RC and masonry rising walls. The façade consists of largely punch windows with elements of curtain walling and an insulated render system throughout. The internal fit-out is typical HSE community nursing specification with individual rooms coupled with own en-suites and large circulation areas, general communal facilities, nursing stations, canteen facilities and the like.

The new stand-alone CNU building ties into the existing buildings on site and the project includes the upgrade of rooms within the existing building at the interface areas. The related demolition and refurbishment works are relatively modest at circa 1.5% of the total contract sum.

The project includes a large amount of site development works within the existing campus including the construction of additional parking, circulation roads and other ancillary external spaces.

#### Completed Appendices 4 and 5 Parts 1 and 2 - Healthcare Facility

**Completed Appendix 4** 

#### Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERH Works **Percentage of Contract Sum** (a) Labour 35% (b) **Materials** 56% 1% (c) **Fuel** (d) Plant 3% Non-adjustable overheads 5% (e) 100% **Totals** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD **Permitted Increase:** 5.00% **Permitted Decrease:** -10.00%

#### **Completed Appendices 4 and 5 Parts 1 and 2 – Healthcare Facility**

#### **Completed Appendix 5 Part 1**

Form Tender and Schedule (FTS1 to FTS4)

**APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR MATERIAL CATEGORIES

	Weight	<b>Material Categ</b>	ory	Sub-Ca	tegory	Sub-Sub-Category	
(1)	0.0559	Stone, sand and	gravel				
(1.1)			0.0506	Stone			
(1.2)			0.0053	Sand and	d Gravel		
(2)	0	Cement					
(3)	0.0783	Ready Mixed Mo	rtar and	Concrete			
(4)	0.0048	Concrete Blocks	and Brick	S			
(5)	0.0063	Other Concrete F			Precast		
(6)	0.2409	Structural and R					
(6.1)			0.1605	Structura			
(6.1.1)						Fabricated Metal	
(6.1.2)						Other Structural Steel	
(6.2)				Reinforci			
(6.3)					eel Produ	ts	
(7)	0.0223	Rough Timber (in					
(7.1)				Hardwoo			
(7.2)				Softwood	d		
(8)	0.0634	Machine Treated	Machine Treated Timber  0.0241 Wooden Windows and Doors				
(8.1)							
(8.2)			0.0393 Other Treated Timber  Bituminous macadam, as phalt and bituminous emulsions				
(9)	0.0125	Bituminous mac					
(9.1)						lam and asphalt	
(9.2)	0.0004	=1 . 1 . 1 . 5		Bitumino	ous emuls	ions	
(10)	0.0984	Electrical fittings		L'alara a l	<b>-</b> . •		
(10.1)					Equipmer		
(10.2)	0.4170	All other materia		Protectio	n and Col	mmunication Equipment	
(11)	0.4172	All other materia		Dhumbin	~ N Astorial	a including Coniton (More	
(11.1)						s including Sanitary Ware  Ventilation Equipment)	
(11.2)					g Material		
(11.4)				Pipes and		<b>3</b>	
(11.4.1)			0.0333	i ipes al li	0.0255	PV/C	
(11.4.1)						Copper	
(11.5)			0.0254	Plaster	0.01	СОРРСІ	
(11.6)					ils and var	nishes	
(11.7)			0.0499		iis aria var	11131103	
(11.8)				All other	fittings		
(11.9)				All other			
Total	1		2050	20.01	1-1-2-2-2-2-2-2		

#### Completed Appendices 4 and 5 Parts 1 and 2 - Healthcare Facility

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4)

**APPENDIX 5 PART 2 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

	Weight	Fuel Ca	tegory		
(1)	0.76	Fuel oil			
(1.1)	0.24	Electric	ity		
(1.2)	0	than			
		autodi	esel	_	
Total	1				

- The percentages of the contract sum for each works category in the Appendix 4 table must all add up to 100%.
- The weightings for the Material Categories in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- **Description of Products for Buildin and Construction**
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vlaue of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook must mirror those provided in the FTS.
- The **Permitted Increase** vlaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** vlaue is fixed.

#### 5.4 Housing

The three types of housing construction that covered under this heading are:

ICF

Timber Frame

Blockwork

5.4.1 Type of construction: ICF Housing

**Location:** Croom area near Limerick City Approx

**Approx. Value**: €16M

#### **Project Description**

The project is located in Croom near Limerick and consists of 56 residential housing units single, semidetached, and terraced with associated ancillary site development works, roads, boundary treatments and site services, hard and soft landscaping etc.

The houses have a Core insulated foundation with an ICF superstructure which is plastered directly on to the insulation externally and has a plasterboard and skim internal finish with metal floor joists with an OSB finish at first floor level and a standard timber Truss roof and concrete roof tile. PVC windows and doors. The development has a standard M&E fitout with air to water heat pumps.

#### Completed Appendices 4 and 5 Parts 1 and 2 - ICF Housing

#### **Completed Appendix 4** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERH Works **Percentage of Contract Sum** Labour (a) 37% **Materials** 55% (b) Fuel 1% (c) 2% **Plant** (d) Non-adjustable overheads 5% (e) 100% **Totals** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD **Permitted Increase:** 3.00% **Permitted Decrease:** -10.00%

#### Completed Appendices 4 and 5 Parts 1 and 2 - ICF Housing

#### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4)

**APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR **MATERIAL** CATEGORIES

	Weight	Material Categ	ory	Sub-Ca	tegory	Sub-Sub-Category
(1)	0.08	Stone, sand and	gravel			
(1.1)				Stone		
(1.2)			0.08	Sand and	d Gravel	
(2)	0.024	Cement				
(3)	0.072	Ready Mixed Mo				
(4)	0.003	<b>Concrete Blocks</b>	and Brick	(S		
(5)		Other Concrete			Precast	
(6)	0.188	Structural and R				
(6.1)			0.136	Structura	l Steel	
(6.1.1)						Fabricated Metal
(6.1.2)						Other Structural Steel
(6.2)				Reinforci		
(6.3)				Other Ste		cts
(7)	0	Rough Timber (in				
(7.1)				Hardwoo		
(7.2)				Softwood	d	
(8)	0.003	Machine Treated	Machine Treated Timber			
(8.1)						and Doors
(8.2)				.001 Other Treated Timber		
(9)	0.018	Bituminous mad				
(9.1)						dam and asphalt
(9.2)	0.101			Bitumino	us emuls	ions
(10)	0.104	Electrical fittings		1 . 1		
(10.1)				Lighting I		
(10.2)	0.402	All - th t		Protectio	n and Col	mmunication Equipment
(11)	0.493	All other materia		Dllai.a.	- \ 1 - 4! -	- i
(11.1)						s including Sanitary Ware
(11.2)				Insulating		d Ventilation Equipment)
(11.3)				Pipes and		5
(11.4.1)			0.09	ripes and	0.09	D\/C
(11.4.1)						
(11.4.2)			Ω	0 Copper 0 Plaster		
(11.6)				Paints, oi	ls and var	nishes
(11.7)					is ai iu val	1 1131 123
(11.7)			0.026 Glass 0.102 All other fittings			
(11.9)				All other		
Total	1		0.033	, ai ou iei	products	
1000	<u> </u>					

#### Completed Appendices 4 and 5 Parts 1 and 2 - ICF Housing

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4)

#### APPENDIX 5 PART 2 to Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

		Fuel Category	•	
(1)	0.1	Fuel oil		
(1.1)	0.3	Electricity		
(1.2)	0.6	than		
		autodiesel		
Total				

- The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- The weightings for the **Material Categories** in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- **Description of Products for Buildin and Construction** 3
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vlaue of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook must mirror those provided in the FTS.
- The Permitted Increase vlaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** value is fixed.

**5.4.2 Type of Construction:** Timber Frame Housing

**Location**: Tower area near Cork City

**Approx Value**: €30M

#### **Project Description**

The project is located in Tower near Cork City and consists of 100 residential housing units single, semidetached, and terraced with associated ancillary site development works, roads, boundary treatments and site services, hard and soft landscaping etc. This was a very steep site and had a lot of precast retaining walls.

The houses have a raft foundation with a Timber Frame superstructure which is finished externally with block and plaster and has a plasterboard and skim internal finish with timber floor joists with an OSB finish at first floor level and a standard timber Truss roof and concrete roof tile. PVC windows and doors. The development has a standard M&E fitout with air to water heat pumps.

#### Completed Appendices 4 and 5 Parts 1 and 2 - Timber Frame Housing

**Completed Appendix 4** 

#### Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERH Works Percentage of Contract Sum (a) Labour 39% (b) **Materials** 53% Fuel 1% (c) 2% (d) Plant Non-adjustable overheads 5% (e) 100% Totals Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation PART 2 PERMITTED INCREASE THRESHOLD Permitted Increase:** 3.00% **Permitted Decrease:** -10.00%

#### **Completed Appendices 4 and 5 Parts 1 and 2 - Timber Frame Housing**

### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR **MATERIAL** CATEGORIES

	Weight	Material Category	Sub-Category Sub-Sub-Category		
(1)	0.065	8	_		
(1.1)		0.039	Stone		
(1.2)		0.026	Sand and Gravel		
(2)	0				
(3)	0.039				
(4)	0.038				
(5)	0.067				
(6)	0.024				
(6.1)		0	Structural Steel		
(6.1.1)			0 Fabricated Metal		
(6.1.2)			0.006 Other Structural Steel		
(6.2)			Reinforcing Metal		
(6.3)		I The state of the	Other Steel Products		
(7)	0.002	Rough Timber (including			
(7.1)			Hardwood		
(7.2)		The state of the s	Softwood		
(8)	0.22	Machine Treated Timber			
(8.1)			Wooden Windows and Doors		
(8.2)		0.16 Other Treated Timber			
(9)	0.029		phalt and bituminous emulsions		
(9.1)			Bituminous macadam and asphalt		
(9.2)			Bituminous emulsions		
(10)	0.033	Electrical fittings			
(10.1)			Lighting Equipment		
(10.2)			Protection and Communication Equipment		
(11)	0.483	All other materials			
(11.1)			Plumbing Materials including Sanitary Ware		
(11.2)			HVAC (Heating and Ventilation Equipment)		
(11.3)			Insulating Materials		
(11.4)		0.054	Pipes and Fittings		
(11.4.1)			0.054 PVC		
(11.4.2)			0 Copper		
(11.5)			Plaster		
(11.6)			Paints, oils and varnishes		
(11.7)			Glass		
(11.8)			All other fittings		
(11.9)		0.08	All other products		
Total	1				

#### Completed Appendices 4 and 5 Parts 1 and 2 - Timber Frame Housing

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 5 PART 2 to Clause 15 Price Variation** 

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

	Weight			
(1)	0.1	Fuel oi		
(1.1)	0.1	Electric	city	
(1.2)	0.8	than		
		autodi	esel	
Total	1			

- The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- The weightings for the Material Categories in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- <u>Description of Products for Buildin and Construction.</u>
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vaaue of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook <u>must</u> mirror those provided in the FTS.
- The **Permitted Increase** vlaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** value is fixed.

#### 5.4.3 Type of Construction- Block Housing

**Location:** Cork City **Approx. Value:** €28M

#### **Project Description**

The project is located in Cork City and consists of 118 residential housing units single, semidetached, and terraced with associated ancillary site development works, roads, boundary treatments and site services, hard and soft landscaping etc.

The houses have standard foundations with a block superstructure which is plastered externally and has a plaster and skim internal finish with timber floor joists with an OSB finish at first floor level and a standard timber Truss roof and concrete roof tile. PVC windows and doors. The development has a standard M&E fitout with air to water heat pumps.

#### Completed Appendices 4 and 5 Parts 1 and 2 - Block Housing

**Completed Appendix 4** 

#### Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERHEAD Works **Percentage of Contract Sum** (a) Labour 40% (b) **Materials** 52% (c) **Fuel** 1% Plant 2% (d) (e) Non-adjustable overheads 5% 100% **Totals** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD **Permitted Increase:** 3.00% **Permitted Decrease:** -10.00%

#### Completed Appendices 4 and 5 Parts 1 and 2 - Block Housing

#### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4)

**APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICES AND WEIGHTINGS FOR MATERIAL CATEGORIES

	Weight	<b>Material Categ</b>	ory	Sub-Ca	tegory	Sub-Sub-Category
(1)	0.064	Stone, sand and	gravel			
(1.1)			0.039	Stone		
(1.2)			0.025	Sand and	d Gravel	
(2)	0	Cement				
(3)	0.044	Ready Mixed Mo	rtar and	Concrete		
(4)	0.079					
(5)	0.034				Precast	
(6)	0.044	Structural and R				
(6.1)			0	Structura		
(6.1.1)					•	Fabricated Metal
(6.1.2)						Other Structural Steel
(6.2)				Reinforci		
(6.3)					eel Produc	cts
(7)	0.002	Rough Timber (ir				
(7.1)			Ū	Hardwoo	-	
(7.2)				Softwood	b	
(8)	0.165	Machine Treated				
(8.1)						and Doors
(8.2)		0.104 Other Treated Timber				
(9)	0.029	Bituminous mac				
(9.1)						dam and asphalt
(9.2)				Bitumino	ous emuls	ions
(10)	0.033	Electrical fittings				
(10.1)					Equipmer	
(10.2)				Protectio	n and Cor	mmunication Equipment
(11)	0.506	All other materia		51 11		
(11.1)						s including Sanitary Ware
(11.2)						d Ventilation Equipment)
(11.3)					g Material	S
(11.4)			0.054	Pipes and		DI /C
(11.4.1)					0.054	
(11.4.2)			0.465	Diser	0	Copper
(11.5)				Plaster	1	
(11.6)					ls and var	nisnes
(11.7)				Glass	C** . *	
(11.8)				All other		
(11.9)	4		0.08	All other	products	
Total	1					

#### Completed Appendices 4 and 5 Parts 1 and 2 - Block Housing

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4)

#### **APPENDIX 5 PART 2 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

		Fuel Ca		
(1)	0.1	Fuel oi		
(1.1)	0.6	Electric	city	
(1.2)	0.3	than		
		autodi	esel	
Total	1			

- The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- The weightings for the **Material Categories** in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- <u>Description of Products for Buildin and Construction.</u>
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vlaue of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook must mirror those provided in the FTS.
- The Permitted Increase vlaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** value is fixed.

#### 5.6 Commercial

OfficeLocation: Dublin area (outside city centre),

Value: €74M,

Project Overview: Shell and Core and CAT A fit-out included, further tenant fit-out excluded

#### **Project Description**

The project is in south county Dublin and consisted of the construction of an office block and associated double basement consisting of nine floors of office space from lower ground floor upwards with carparking and plant rooms on the level below. The approximate floor area of the office space is 19,465 m2.

The structure of the project is reinforced concrete and the façade is primarily glazed (curtain walling, unitised glazing and a spider glass enclosure to feature lifts) with some stone cladding. The roof is covered with a 3 ply bituminous covering with the addition of hard and soft landscaping and sedum roofing.

The development also included hard and soft landscaping and all ancillary works including lighting, site excavation and development works.

#### Completed Appendices 4 and 5 Parts 1 and 2 - Commercial

#### **Completed Appendix 4** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERHEADS Works **Percentage of Contract Sum** (a) Labour 36% (b) **Materials** 56% Fuel 1% (c) (d) 2% Non-adjustable overheads (e) 5% **Totals** 100% Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD Permitted Increase: 3.00% **Permitted Decrease:** -10.00%

#### **Completed Appendices 4 and 5 Parts 1 and 2 - Commercial**

#### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4)

**APPENDIX 5 PART 1 to** Clause 15 Price Variation INDICEA AND WEIGHTINGS FOR **MATERIAL** CATEGORIES

	Weight	Material Category	Sub-Category Sub-Sub-Category				
(1)	0.008	Stone, sand and gravel	_				
(1.1)		0	Stone				
(1.2)		0.008	Sand and Gravel				
(2)	0	Cement	Zement				
(3)	0.091						
(4)	0.003						
(5)	0.007						
(6)	0.112	Structural and Reinforcin					
(6.1)		0.005	Structural Steel				
(6.1.1)			0 Fabricated Metal				
(6.1.2)			0 Other Structural Steel				
(6.2)			Reinforcing Metal				
(6.3)			Other Steel Products				
(7)	0.001	Rough Timber (including					
(7.1)			Hardwood				
(7.2)			Softwood				
(8)	0.011	Machine Treated Timber					
(8.1)			Wooden Windows and Doors				
(8.2)			Other Treated Timber				
(9)	0.018		phalt and bituminous emulsions				
(9.1)			Bituminous macadam and asphalt				
(9.2)			Bituminous emulsions				
(10)	0.103	Electrical fittings					
(10.1)			Lighting Equipment				
(10.2)			Protection and Communication Equipment				
(11)	0.646	All other materials					
(11.1)			Plumbing Materials including Sanitary Ware				
(11.2)			HVAC (Heating and Ventilation Equipment)				
(11.3)			Insulating Materials				
(11.4)		0.009	Pipes and Fittings				
(11.4.1)			0.009 PVC				
(11.4.2)			0 Copper				
(11.5)			Plaster				
(11.6)			Paints, oils and varnishes				
(11.7)			Glass				
(11.8)			All other fittings				
(11.9)		0.29	All other products				
Total	1						

#### Completed Appendices 4 and 5 Parts 1 and 2 - Commercial

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 5 PART 2 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

		Fuel Ca			
(1)	0.2	Fuel oil			
(1.1)	0.7	Electric	ity		
(1.2)	0.1	Gas Oil	(other	than	
		autodie	esel)		
Total	1				

- 1 The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- 2 The weightings for the **Material Categories** in the Appendix 5 Part 1 & **Fuel Categories** in Appendix 5 Part 2 right must all add to 100%.
- 3 <u>Description of Products for Buildin and Construction.</u>
- 4 Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the value of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook <u>must</u> mirror those provided in the FTS.

#### 5.7 Industrial: Warehouse

Location: Dublin area (outside city centre),

Value: €33M

#### **Project Description**

The Project is located in West Dublin and consists of the construction of a logistics warehouse with ancillary office accommodation (total c. 25,268m2) to an overall height of 14.86 metres. The warehouse element of the development is principally single storey including an ancillary mezzanine level (554 m2).

The ancillary offices, comprising c. 1,737 m2, are provided over three storeys and include toilets, changing rooms, showers, cafeteria, gym, plant areas and circulation spaces. The development also included: 179 no. surface car parking spaces; hard and soft landscaping; sprinkler storage tanks and pump house; an electrical substation (c. 54 sqm); and all ancillary works including boundary treatments, street lighting, site excavation and development works above and below ground.

The frame is structural steelwork and the façade consists primarily of insulated cladding panel with some glazed elements. The pitched roof is covered with insulated roofing panels with rooflights. 19 dock levellers/scissor lifts were installed.

#### Completed Appendices 4 and 5 Parts 1 and 2 – Industrial Warehouse

#### **Completed Appendix 4** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERH Works **Percentage of Contract Sum** Labour (a) 37% 55% (b) Materials (c) Fuel 1% Plant (d) 2% (e) Non-adjustable overheads 5% 100% **Totals** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD **Permitted Increase:** 3.00% **Permitted Decrease:** -10.00%

#### Completed Appendices 4 and 5 Parts 1 and 2 – Industrial Warehouse

#### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR **MATERIAL** CATEGORIES

	Weight	Material Category	Sub-Category Sub-Sub-Category
	0.08		
(1.1)			0 Stone
(1.2)	0	0.0	8 Sand and Gravel
(2)	0.024	Cement	
(3)	0.072	Ready Mixed Mortar an	d Concrete
(4)	0.003		
(5)	0.015		
(6)	0.188	Structural and Reinforc	
(6.1)		0.13	6 Structural Steel
(6.1.1)			0 Fabricated Metal
(6.1.2)			0 Other Structural Steel
(6.2)			Reinforcing Metal
(6.3)			4 Other Steel Products
(7)	0	Rough Timber (including	
(7.1)			0 Hardwood
(7.2)			0 Softwood
(8)	0.003	Machine Treated Timbe	
(8.1)		The state of the s	2 Wooden Windows and Doors
(8.2)			1 Other Treated Timber
(9)	0.018		asphalt and bituminous emulsions
(9.1)			Bituminous macadam and asphalt
(9.2)			5 Bituminous emulsions
(10)	0.104	Electrical fittings	
(10.1)			0 Lighting Equipment
(10.2)			Protection and Communication Equipment
(11)	0.493	All other materials	
(11.1)			9 Plumbing Materials including Sanitary Ware
(11.2)			8 HVAC (Heating and Ventilation Equipment)
(11.3)			Insulating Materials
(11.4)		0.0	Pipes and Fittings
(11.4.1)			0.09 PVC
(11.4.2)			0 Copper
(11.5)			0 Plaster
(11.6)			Paints, oils and varnishes
(11.7)			6 Glass
(11.8)			2 All other fittings
(11.9) <b>Total</b>	1	0.09	9 All other products
		I .	

#### Completed Appendices 4 and 5 Parts 1 and 2 – Industrial Warehouse

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4)

#### **APPENDIX 5 PART 2 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

		Fuel Category	
(1)	0.3	Fuel oil	
(1.1)	0.6	Electricity	
(1.2)	0.1	Gas Oil (other	than
		autodiesel)	
Total	1		

- The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- The weightings for the Material Categories in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- <u>Description of Products for Buildin and Construction.</u>
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vauue of the mail category/sub-category. This has an impact on the materials.
- All material and Fuel category values inserted in this workbook must mirror those provided in the FTS.
- The **Permitted Increase** vaaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** vlaue is fixed
- Instructions for completing this workbook are provided under GN here.

#### 5.7 Education Facility

Location: South Side of Dublin

**Approx. Value:** €74M

**Project Overview:** New Learning Facility

#### **Project Description**

The project is located South Dublin on a brown field site. The overall floor area of the project is 11,580/m2 over for floors. The building ranges from 5.4metres to an overall height of 19m. It's a mixture of lecture theatre classrooms and workspace facilities.

The façade is mix of glazing and stone cladding with Rheinzinc clad canopies. The roof is green sedum roof system with rooflights and paved areas.

The project includes a large amount of site development works within the existing campus including the construction of additional parking, circulation roads and other ancillary external spaces.

#### Completed Appendices 4 and 5 Parts 1 and 2 – Education Facility

#### **Completed Appendix 4** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** 1 PROPORTIONS OF LABOUR, MATERIALS, FUEL, PLANT AND NON-ADJUSTABLE OVERH Works **Percentage of Contract Sum** (a) Labour 31% Materials 57% (b) (c) Fuel 2% (d) Plant 5% Non-adjustable overheads (e) 5% 100% **Totals** Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 4 to Clause 15 Price Variation** PART 2 PERMITTED INCREASE THRESHOLD **Permitted Increase:** 5.00% **Permitted Decrease:** -10.00%

#### **Completed Appendices 4 and 5 Parts 1 and 2 - Education Facility**

#### Completed Appendix 5 Part 1

Form Tender and Schedule (FTS1 to FTS4) **APPENDIX 5 PART 1 to** Clause 15 Price Variation

INDICEA AND WEIGHTINGS FOR **MATERIAL** CATEGORIES

	Weight	<b>Material Category</b>		Sub-Ca	tegory	Sub-Sub-Category	
(1)	0.08						
(1.1)				Stone			
(1.2)		0.04 Sand and Gravel					
(2)	0						
(3)	0.1	•					
(4)	0.06	Concrete Blocks and Bricks					
(5)	0.06						
(6)	0.12	Structural and Reinfo					
(6.1)			0.03	Structura			
(6.1.1)						Fabricated Metal	
(6.1.2)						Other Structural Steel	
(6.2)				Reinforci			
(6.3)			0.025 Other Steel Products				
(7)	0.06	Rough Timber (include					
(7.1)				Hardwoo			
(7.2)				Softwood	d		
(8)	0.07	Machine Treated Tim					
(8.1)				Wooden Windows and Doors			
(8.2)				Other Treated Timber			
(9)	0.04	Bituminous macadam, asphalt and bituminous emulsions					
(9.1)				Bituminous macadam and asphalt			
(9.2)			0.020	Bituminous emulsions			
(10)	0.1	Electrical fittings					
(10.1)				Lighting Equipment			
(10.2)			0.04	Protection and Communication Equipment			
(11)	0.31	All other materials					
(11.1)				Plumbing Materials including Sanitary Ware			
(11.2)				HVAC (Heating and Ventilation Equipment)			
(11.3)				Insulating Materials			
(11.4)			0.03	Pipes and Fittings			
(11.4.1)					0.0255		
(11.4.2)			0.00	Dist	0.01	Copper	
(11.5)				Plaster			
(11.6)				Paints, oils and varnishes			
(11.7)				Glass			
(11.8)				All other fittings All other products			
(11.9)	4		0.04	All other	products		
Total	1						

#### Completed Appendices 4 and 5 Parts 1 and 2 - Education Facility

#### **Completed Appendix 5 Part 2**

Form Tender and Schedule (FTS1 to FTS4) APPENDIX 5 PART 2 to Clause 15 Price Variation INDICEA AND WEIGHTINGS FOR FUEL CATEGORIES

		Fuel Category		
(1)	0.45	Fuel oil		
(1.1)	0.5	Electricity		
(1.2)	0.05	Gas Oil (other	than	
		autodiesel)		
Total	1			

- The percentages of the contract sum for each works category in the Appendix 4 table above must all add up to 100%.
- The weightings for the Material Categories in the Appendix 5 Part 1 & Fuel Categories in Appendix 5 Part 2 right must all add to 100%.
- <u>Description of Products for Buildin and Construction.</u>
- Where sub-categories/sub-sub-categories are used, the aggregate value of sub-categories/sub-sub-categories must equal the vaaue of the mail category/sub-category. This has an impact on the materials
- All material and Fuel category values inserted in this workbook must mirror those provided in the FTS.
- The **Permitted Increase** vlaue should be adjusted within the range (3%-10%) to reflect the FTS.
- The **Permited Decrease** vlaue is fixed
- Instructions for completing this workbook are provided under GN here.

## **Section 6**

## Summary Breakdown of Mechanical and Electrical Elements

This section outlines the breakdown of electrical and mechanical materials proportions for each of the project categories above.

	Healthcare	Residential	Industrial	Educational	Commercial
Electrical					
Labour	33%	38%	29%	32%	35%
Material	55%	53%	56%	58%	55%
Prelims	12%	9%	15%	10%	10%
Plumbing (Mechanical)					
Labour	28%	35%	29%	24%	28%
Material	60%	56%	58%	65%	62%
Prelims	12%	9%	13%	11%	10%



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