





# Training #11

Infrastructure projects - Preparation of tender documentation for wastewater projects –  
Preparation of other parts of TD, harmonisation of different part of TD



# Other parts of TD

## Volume 1

- Section 2 - Tender form
- Section 3 - Tender guarantee
- Section 4 – Tender questionnaire
- Section 5 – Administrative and Evaluation Grid

# Other parts of TD

## Volume 2

- Section 1 - Contract form
- Section 2 – General Conditions of Contract
- Section 3 – Particular Conditions of Contract
- Section 4 – Performance Quarantee
- Section 5 – Prefinancing Quarantee
- Section 6 – Retention Guarantee

# Other parts of TD

## Volume 3

- Technical Specification
- or
- Employer's Requirements

# Other parts of TD

## Volume 4

- Bill of Quantities
- or
- Breakdown of Lump Sum price



# Other parts of TD

## Volume 5

- Drawings

# Break down of the lump sum price

- itemised list of prices showing the build-up of the price in a lump-sum contract.
- the **total contract price remains fixed** irrespective of the quantities of work actually carried out.
- include all incidental and contingent expenses and all risks necessary to construct, complete and maintain all works in accordance with the contract.

The amounts due will be calculated:

- through the measurement of the **percentage** of works carried out
- by the **tranches** specified in the special conditions



# Example: Breakdown of the Lum Sum prices

2.3. Structure - Aerated grease and grit chamber (Volume 3-Item 3.6.)

2.3.1. Construction sum

2.3.2. Finishing works sum

2.3.3. Mechanical installations and equipment sum

2.3.4. Electrical installations and equipment sum

**2.3. Structure - Aerated grease and grit chamber TOTAL 0,00**

# Example: Breakdown of the Lum Sum prices

Item	Description	Amount in EUR (lump sum)
1	2	3
2.1.1	Coarse screening and inlet pumping station	
2.1.4	Receiving / distribution chambers	
2.1.5	Mechanical water treatment	
	<b>Total Civil Works:</b>	
2.2.1	Wastewater lifting pumping stations	
2.2.2	Screening facilities	
2.2.3	Grit and grease removal chambers	
2.2.4	Activated Sludge Tanks	
	<b>Total Mechanical Works:</b>	
2.3.1	Main MCC/SWG & Sub-Station	
2.3.3	SCADA System	
	<b>Total Electrical Works:</b>	

# Example: Breakdown of the Lum Sum prices

Payment Milestone	Delivery Milestones	Milestone Value	Cumulative Payment
1	<u>Advance Payment</u> Contract signed, bank guarantees submitted to the Employer.	10%	
2	<u>First interim payment</u> Quality Plan approved and Detailed Design delivered. Key equipment ordered.	15%	25%
3	<u>Second interim payment</u> Delivery of equipment in minimum of 30 percent of value from Vol 4 (schedules 3, 4, 5 and 6)	20%	45%



# BoQ Example

No.	No. TS	DESCRIPTION OF WORKS	Unit	Quantity	Unit Price (EUR)	Price (EUR)
				a	b	axb
		A.03b.02.00. EARTH WORKS				
8		A.03b.02.01. Machine and manual excavation of trenches, in soil class II and class III, with dewatering of trench for total trench depths:				
		Machine excavation 0-2 m deep	m <sup>3</sup>	1.091,20		0,00
		Machine excavation 2-4 m deep	m <sup>3</sup>	266,75		0,00
		Machine excavation 4-6 m deep	m <sup>3</sup>	10,32		0,00
		Machine excavation 6-8 m deep	m <sup>3</sup>	0,00		0,00
		Manual excavation 0-2 m deep	m <sup>3</sup>	121,24		0,00
		Manual excavation 2-4 m deep	m <sup>3</sup>	29,64		0,00
		Manual excavation 4-6 m deep	m <sup>3</sup>	1,15		0,00
		Manual excavation 6-8 m deep	m <sup>3</sup>	0,00		0,00

# BoQ Preamble

- The bill of quantities is the document containing an itemised breakdown of the works to be carried out in a unit price contract, indicating a quantity for each item and the corresponding unit price. **The quantities set out in the bill of quantities are estimated quantities.**
- The amounts due will be calculated by **measuring the actual quantities** of the works executed and by applying the unit rates to the quantities actually executed for each item.

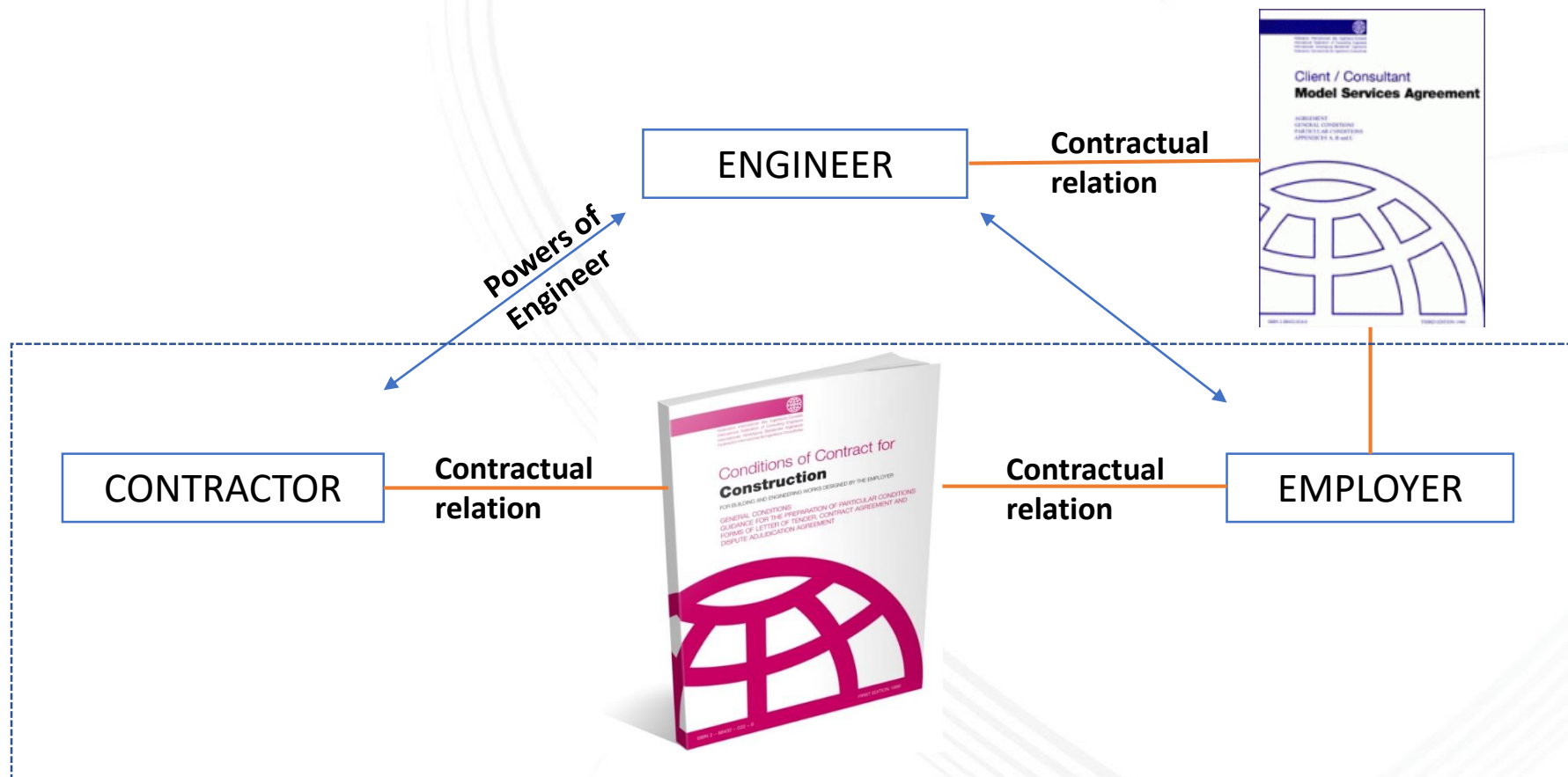
# Relation between PRAG and FIDIC

- PRAG – Contractual procedure: FIDIC – Contract conditions
- Required modification of FIDIC contract in Special contract conditions
- Forms given in PRAG must be used instead of the forms given in FIDIC.
- Modifications to be executed concern the following:
  - Acceptability rules
  - Contract modification procedure
  - Avoiding corruption activities
  - Value engineering
  - Modification of days of duration of particular contract activities and processes (payment significantly prolonged)

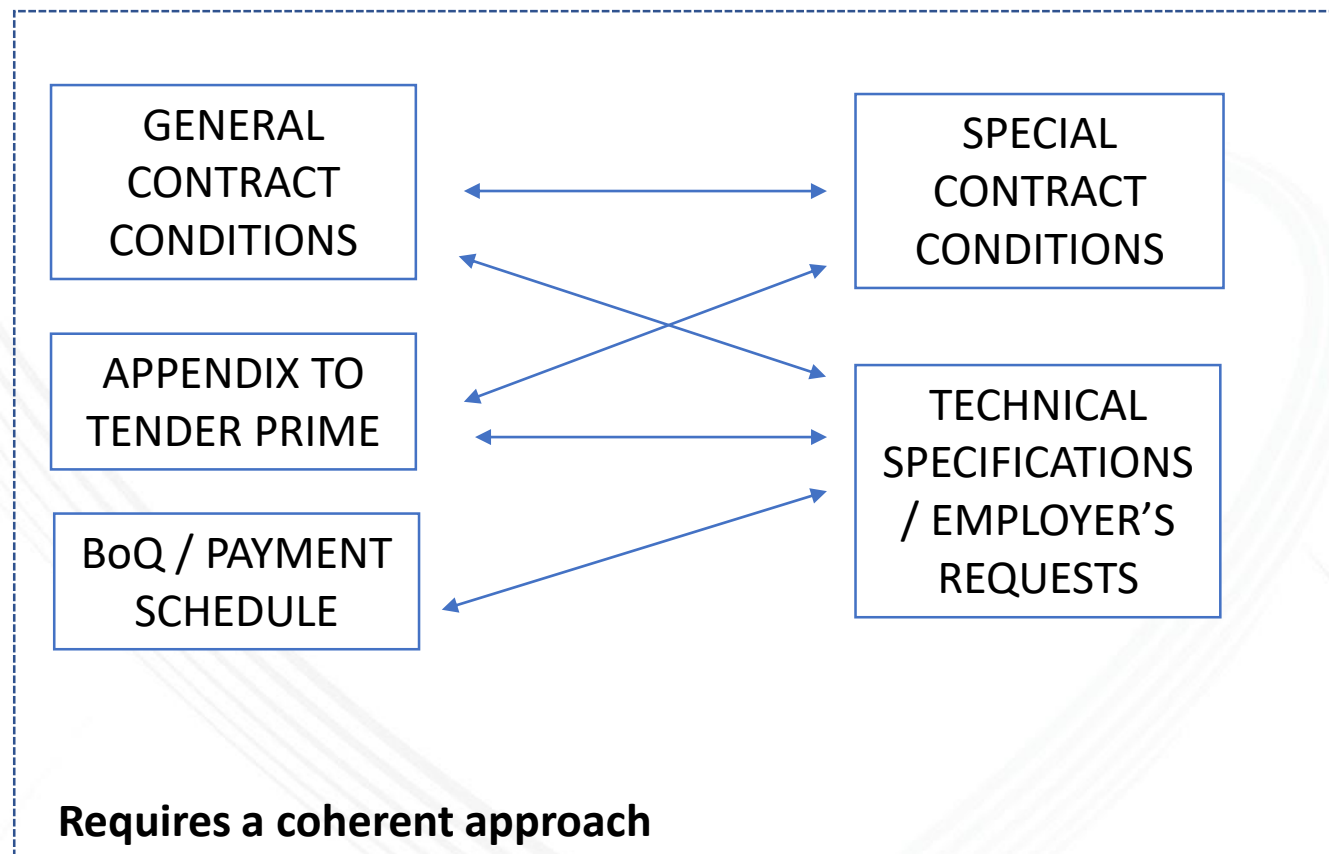


# Relation between TD parts

Contractual relations must be unambiguous and clearly defined



# Relation between TD parts



## VOLUME 1

### SECTION 2

#### TENDER FORM

[APPENDIX TO BE USED ONLY BY NEAR ONLY IN FIDIC CONTRACTS]

[APPENDIX TO THE TENDER]

### TENDER FORM FOR A WORKS CONTRACT

Publication reference: < Publication reference >

Name of contract: < Name of contract > [In case of an EI works contract, this should be clearly indicated in the title]

<Place and date>

A: <Name and address of contracting authority>.

**One signed** form must be supplied (for each lot, if the tender procedure is divided into lots), together with the number of copies specified in the instructions to tenderers. The form must include a signed declaration using the annexed format from each legal entity making the application. **All data included in this form must concern only the legal entity or entities making the application.** The attachments to this form (i.e. declarations, statements, proofs) may be in original or copy. If copies are submitted, the originals must be sent to the contracting authority upon request. For [economical](#) and ecological reasons, we strongly recommend that you submit your files on paper (no plastic folder or divider). We also suggest you use double-sided printing as much as possible.

Any additional documentation (brochures, letters, etc.) sent with the form will not be taken into consideration. Applications submitted by a **consortium** (i.e. either a permanent, legally-established grouping or a grouping which has been constituted informally for a specific tender procedure) must follow the instructions applicable to the consortium leader and its members.

No. <Contract number>

## VOLUME 2

### SECTION 1 CONTRACT FORM

#### WORKS CONTRACT FOR EUROPEAN UNION EXTERNAL ACTIONS

NO. <Contract number>

FINANCED FROM THE [GENERAL BUDGET OF THE UNION] [EDF]

Between

[For direct management: The European Union, represented by the European Commission, B-1049 Brussels, Belgium, on behalf of and for the account of the government of <name of partner country/countries>]

OR [For indirect management <Name and address of the contracting authority>]

("The contracting authority"),

of the one part,

and

<Full official name of contractor>

[<Legal status/title>]<sup>1</sup>

[<Official registration number>]<sup>2</sup>

<Full official address>

[<VAT number>]<sup>3</sup>,

("the contractor")

of the other part,

have agreed as follows:

**PROJECT** <title and reference in the financing agreement/decision>

**CONTRACT TITLE** <Contract title>

**Identification number** <Publication reference>

Whereas the contracting authority would like the contractor to carry out the following works:

**Construction of**

<,>

and has accepted a tender by the contractor for the execution and completion of such works and the remedying of any defects therein.

**It is hereby agreed as follows:**

<sup>1</sup> Where the contracting party is an individual.

<sup>2</sup> Where applicable.

<sup>3</sup> Except where the contracting party is not VAT registered.



# Appendix to tender - Example

Item	Sub-Clause of GC	Data
Employer's name and address	1.1.2.2 & 1.3	Ministry of Finance
Time for Completion of the Works	1.1.3.3	1015 days
Electronic Transmission Systems	1.3	facsimile
Governing Law	1.4	Serbian Law
Ruling Language	1.4	English
Amount of Performance Security	4.2	10% of the Accepted Contract Amount, in Euro
Delay Damages for the Works	8.7	0.1% of the Accepted Contract Amount, in Euro
Maximum amount of delay damages	8.7	10% of the Accepted Contract Amount
Currencies and proportions	14.2	100% in Euro
Minimum amount of Interim Payment Certificates	14.6	150.000 EUR
Currency/currencies of payment	14.15	Euro (EUR)

# Example of the relation between TD parts

## 1.1.2.3 “Employer”

*“Employer” is a person named as employer in the **Appendix to Proposal** and all legal successors of that entity*

## 1.13 “Acting in accordance with the regulations”

*When executing the Contract, the Contractor shall act in accordance with the applicable regulations, unless differently stipulated in the **Special conditions**:...*

## 5.4 “Technical standards and regulations”

*Project, Contractor’s documents, execution and the final works must be in accordance with the national technical standards,... and other standards listed in the **Employer’s requirements**, which refer to works or have been defined by the applicable regulations.*

# Relation between FIDIC and TS/ER

Some parts of the contract must be read together with the ER otherwise they make no sense

**TS / ER Supplement Conditions of Contract with additional information required to conduct the work**

**1.13 Compliance with the law** - the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the **Specification**

**2.21 Right to access the site** - The Employer shall do so in the time and manner stated in the **Specification**.

**4.1 Contractors general obligation** - Contractor's Documents shall be in accordance with the **Specification**

**4.18 Protection of the Environment** - The Contractor shall ensure that emissions, surface discharges ...shall not exceed the values indicated in the **Specification**.

# Relation between FIDIC and TS/ER

Extract of relevant sub-clauses **that refer to** the TS or ER

- 1.13a Permissions obtained by Employer
- 1.1.6.3 Definition of 'Employer's Equipment'
- 4.18 Values for emissions and discharges
- 5.1 Criteria for designers (YB only)
- 5.1 Technical documents to be included in Contractor's Documents (YB only)  
Language for Contractor's Documents (YB only)
- 5.3 Contractor's Documents to be submitted for review and/or approval (YB only)  
Review periods (YB only)
- 5.4 Other standards for compliance (YB only)
- 5.5 Training to be provided for Employer's Personnel (YB only)
- 5.6 Numbers and types of copies of as-built drawings (YB only)
- 5.7 Manuals for operation and maintenance (YB only)



# Relation between FIDIC and TS/ER

Extract of relevant sub-clauses that amplified in the TS or ER

- 1.8 Requirements for Contractor's Documents (RB only)
- 1.13 Permissions being obtained by the Employer
- 4.1 Contractor's designs (RB only)
- 4.1 Intended purposes for which the Works are required (YB only)
- 4.18 Environmental constraints
- 5.5 Operational training for the Employer's Personnel (YB only)
- 5.6 As-built drawings and other records (YB only)
- 5.7 Operation and maintenance manuals (YB only)
- 7.4 Testing during manufacture and/or construction
- 9.1 Tests on Completion
- 12.1 Tests after Completion (YB only)

# Documentation priority order

Documentation priority order must be in accordance with the following:

- (a) Contract,
- (b) Contract Appendix (Appendix to tender),
- (c) Special contract conditions,
- (d) General contract conditions,
- (e) Technical specifications / Employer's requirements,
- (f) Drawings,
- (g) Other contract documentation – bidder's proposal.

# EU PROJECT PREPARATION FACILITY PROJECT

All documents, information, materials and pictures from this EU PPF training are available for download in the download section of our site [www.ppf.rs](http://www.ppf.rs)

# Questions and assistance

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**Thank you for your attention!**