

„Design Duties – file name: S+DesignDuties.pdf

- (i) Service Contract / Engineer**
- (ii) Works Contract / Contractor**
- (iii) Sub-Contract for Design >
German Structural Analyst**

25.000 – 30.000 Euro per 8 hours per day, 22 working days per month.

„Make RULE of LAW great ...or follow



- A _ **Get the Service Contract with low costs**,
do not deploy your low paid employees, better to let
pay & work Contractor's staff for the Engineer.
- B _ **Join the Cartel of Silence** (www.ppe61.de/OLAF1.pdf)
Apply Bazaar Methodologies with mala fide.
- C _ **Influence Sub-Contracting + commissions**
Material trading (Specification changes in **Qualities**),
Equipment rental, Labour lease, Quantity Increase
- D _ **Method of Measurement and Payment**
100% built - 200% - 200% paid
- E _ **Share the bargains** of commissions between
decisions makers, Engineers, M/C and S/C
- F _ **and find a talented way to blackmail them.**

This file name: www.ppe61.de/2022ContractAdministration.pdf

„Make RULE of LAW great ...or follow



Tutorial under construction

DRAFT

- > Data will be upgraded
- > Text will be explained by voice in Sierra Leone
- > Variations / Claims

www.ppe61.de/00+HUB123-ALL.pdf

„The Actors influencing the unexpected wealth

- ▶ in all Project Cycles from Programming to Commission:
with lack of **adequate Design**, lack of **geotechnical explorations**
- ▶ Procurement departments and Design Consultants
with obsolescence
- ▶ Evaluation and Award of Contract www.ppe61.de/S+ByPassCompetition.pdf
- ▶ Implementation in reference to Red FIDIC Book / MDB2010
with **sophisticated Variations and Methods of Measurement & Payments**
- ▶ Defect Notification Period

The document www.ppe61.de/OLAF.pdf identifies crucial issues in all project cycles to embezzle and it provides the alternatives : 100% - 200% - 200% and Evaluations: www.ppe61.de/S+ByPassCompetition.pdf

„Service Contract : Tasks of the Engineer“

- ▶ Review of Design and Supervision in compliance with Red FIDIC/MDB2010
- ▶ The Civil works will be carried out in accordance with the **DETAILED Engineering DESIGN - prepared by the EMPLOYER**
- ▶ Drawings, BoQ provisions, specification with respect to actual site conditions both for **permanent and temporary works** within 30 days after submission of such documents and suggest modification, if required or deemed appropriate
- ▶ TL tasks : **Obtain related approvals** from concerned authorities for any **REDESIGN** of road alignment, modifications and **REDESIGN** of bridges and tunnels.

„Service Contract : Duties of the Engineer“

- ▶ Any realignment, **redesign / modification**, any additional design of the bridges and tunnels desired for completion of the project will be done by **CONSULTANT** and related approvals from concerned authorities will be obtained by the Consultant, if any suggested, **be funded under provisional sum under the Engineer's contract.**
- ▶ If the Contractor shall do the design modifications – exceptional - , a provisional sum under the Engineer's Service Contract is provided to **compensate the Contractor's design** (deployment of the e.g. German Sub-Contractor to adapt the Employer's Drawings/ Design due to i.e. geotechnical / hydrological/ or other subsurface soil issues / UPC (SC04.12) ... **Soil Risk rests with Employer.**

„Service Contract : Responsibilities of Engineer“

- ▶ Highway Engineer / Pavement Expert: Review design, drawings for the roadworks carry out design of any realignment redesign / **modifications of the roadwork components**, if necessary as per site conditions.
- ▶ Bridge Engineer / Structural Engineer: Establish the schedule, methods and procedures for the **review of DETAILED Engineering design and construction drawings** (supplied by Employer) and construction drawings of the bridges, culverts, and other structures for the project

„Service Contract : Tasks of the Engineer“

- ▶ Bridge Engineer: Ensure that the design finalized is based upon hydrological + subsurface conditions, and geo-technical studies, cost effectiveness and ease of construction and design of protective works, erosion control measures, snow drift control, snow clearance measures have been included.
- ▶ Ensure that the Tech Spec in the Bid Documents and Road Construction Standards have been duly taken into account in preparation of the design documents provided by Employer (Employer's Designer)

„Service Contract : Duties of the Engineer“

- ▶ Bridge Engineer Provide: **Periodic status report of the design and review** activities as measures against the approved schedule. Identify any problems and **difficulties encountered and propose solutions.**
- ▶ Geotechnical Engineer ... **Inspect cut slopes and identify any special measures to ensure stability.**
- ▶ **Design any supplementary drainage, slope protection, and retaining structure by the Geotechnical Engineer**
- ▶ Road Safety Specialist: Road safety audit during the **design review** phase and organization of **traffic management during construction**

„Works Contract“ Functional Documents

- ▶ B1 _ Employer's Design / Employer's Documents (Red Book, MDB2010)
 - Scope of Works (i) Nature and (ii) Extent for re-measurement
- ▶ B2 _ “Method of Measurement and Payment” Book (separately)
 - How to derive my Contract Price?
 - B21 > Make up of Unit Rate with main works,
ancillary and auxiliary Works, temporary Works, and
 - B22 > Re-measurement procedures (Red FiDiC Book, MDB2010)
- ▶ B3 Conditions of Contract >
 - Under which rules shall the Contract be implemented
 - PCC Part A = legal issues + Part B = technical / special provisions

„Works Contract“ Functional Documents

▶ B4 Tech Specification > Quality Assurance System

Quality Assurance QA: **product- and process-oriented approach**, **pro-active procedures** to prevent mistakes, errors, defect “**ahead of commencement**” of works;

Quality Control / QC: **product-oriented** procedure to approve the Requirements were met, **testing “after execution”**.

How to carry out (a) appropriate resource input, (b) Method and sequencing to execute = Contractor’s Duty, (c) Inspection & Testing

▶ B5 Bill of Quantity in combination with the “Method of Measurement and Payment”. **Re-Measurement out of As-Built-drawing and Payment**

GCC SC03.3 Instructions of the Engineer

- The Engineer may **ISSUE** to the Contractor (at any time)
- (i) instructions and ENG may issue
 - (ii) **ADDITIONAL** or **MODIFIED** drawings, **which may necessary for the execution of the Works** and
 - (iii) the remedying of the defects (e.g. design errors), all in accordance with the Contract.
- If an “instruction” constitutes a Variation > Clause 13 [Variations and Adjustments] shall apply and the **ENG requests a Variation Proposal typically.**
- Note: The Contractor shall clarify “instruction” Yes or No. If the **Engineer does NOT request a Variation Proposal [SC13.3 (a) (b) (c)] a Notice to Claim shall be issued** immediately to secure the rights/entitlements with the structure of Disruptions and Delays, to furnish evidence for his compensation.

GCC SC04.1 p4 CON responsibility

- ▶ Contractor shall responsible for the
 - ❖ Adequacy,
 - ❖ Stability, and
 - ❖ safety
 - ❖ of all Site operations and of
 - ❖ all methods of construction

in compliance with Red FiDiC Book 1999 / Construction MDB2010

GCC SC04.1 p4

- ▶ The Contractor shall **NOT** otherwise be responsible for the **DESIGN** or **SPECIFICATIONS** of the Permanent works.

Note: The Engineer has to obtain the **specified authority** to **amend** the Conditions of Contract Contract.

GCC SC04.1 p4 ... SC04.1p6 ... SC01.10

- ▶ *Red FIDIC Book / MDB2010 Postulate:*
Employer designs, Contractor builds
*The Contractor shall **NOT** otherwise be responsible for the **DESIGN** or **SPECIFICATIONS** of the Permanent works.*
- ▶ If the Contractor shall design parts of the Works – laid down in the “**Particular Conditions of Contract**” **SC04.1p6** – or instructed by the Engineer, the Contractor shall **retain the copyright & other intellectual property rights** in the Contractor’s Documents made by (on behalf) of the Contractor pertaining to **SC01.10** “Employer’s Use of Contractor’s Documents (MDB2010, Red FIDIC Book and others)

GCC SC04.1 p6 CON's General Obligations only, IF defined.

- ▶ The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions and shall remedy any defect in Works. Design Instructions can only given, if the scope is defined in the Contract (PCC) or Employer approves the "change in the Conditions of Contract".
- ▶ If the Contractor shall design some works (must be clearly stated in the PCC ref to GCC SC04.1para6 ... then unless otherwise stated in the Particular Conditions ...). If the method of measurement (Quantum) and payment is NOT defined, the Contractor shall submit a Notice of Claim immediately for any disruption + delay. The Contractor can consequently deploy i.e. S/C-specialists for Structural Analysis from Germany and claims all the deployment, service and delay costs (flights, per diems, fee, all inclusive package 25.000 Euro p.m.), the lost construction periods due to exploration times, design costs for changes, approval times by Engineer, quantity increases, prolongation costs for EoTfC.

PCC SC04.1 Part B > Deviation to usual principles of RED / MDB.

- ▶ **Added in PCC !!!** “The Contractor undertakes that its designers and design subcontractors (if any), shall be **available to attend discussions** with the Engineer at all times, **with reasonable period of NOTICE, up to the issuance of Taking-Over Certificate,**
- ▶ Note: If **no quantum** and **no “Method of Measurement and Payment”** is defined in the Tender Dossier, the Contractor is **not able to assess** the **extent of the unforeseeable design** and hence the expected expenses. Speculative Rates are not allowed in Germany to distort – as Gambler – the final Prop / Contract Price. **Usually, a breakdown of Provisional Sums considers the value of the unexpected extent of services.** Hence the **Contractor** cures the default of the Drafter with a **Notice to Claim** of all “requested” deployments of professionals on-site, **exploratory works, design services** in China or places of S/C (e.g. Germany), **design costs** (e.g. 25.000 Euro per month deployment on-site + services), **overheads** & paid times for **attending all meetings** – with the “reasonable” **NOTICE period.**

B4 Tech Specification > Quality Assurance System

- ▶ Very often, Procurement Departments **mix up the rationale behind the main functions** of the integral parts of the CONTRACT : Drawings / Design, Rules, Method of measurement for Breakdown of Prices, Quality Assurance System and Re-measurement of the Permanent Works for Payment (BoQ).
- ▶ **Observed Errors in the Technical Specification**
 - A _ Contractor's Design Works are hidden or listed in the Specification. **GCC SC04.1p6 states clearly, then unless otherwise stated in the Particular Conditions.**
 - B _ Measurement items are hidden in the **Tech Specifications** to **mislead the Contractor's estimators** to submit a complete Bid Price.

B5 > Bill of Quantity:

Re-Measurement out of As-Built-drawing and Payment

▶ Any item of work included in the Bill of Quantities for which **no rate or price was specified** shall be considered as included in other rates and prices in the Bill of Quantities and **will not be paid FOR SEPERATELY** (MDB SC12.3 para 3)

But this applies only, (i) if the **Scope of Works/Quantities can be identified** in the Drawings in order to be able to **compute the time and efforts and regard these costs plus overheads in other BoQ-items**. (ii) If the **Contractor shall execute** Design for specified structures, **the Particular Conditions of Contract** have to precisely describe the **NATURE and EXTENT of the Design Services and the method of measurement and payment consistently**. The Contractor must be able to compute his **efforts in time and costs + overheads in an unambiguous manner** to get **paid fairly for his rendered Design Services**.

Engineer's Instruction to change the Design

(requires the Employer's approval to amend Contract SC03.1 p2)

- ▶ Definition Variation SC13.1 (a) – (f) [Right to V
 - (a) Change in **Quantities** (Time impact!)
 - (b) **Quality** and other characteristics of any item of works
 - (c) change in level, positions, and/or **dimensions**
 - (d) **omissions** (SC12.4)
 - (e) additional works, Plant, Materials or **Services** necessary for the Permanent works, tests, boreholes, testing, **exploratory works**
 - (f) changes to the **sequence or timing** of the execution of works
- ▶ The Contractor **has to await** the (i) **approval** of the Variation Proposal “OR” direct given **instruction** to execute the “varied” works.

Variation Proposal requested by Engineer? No!
Immediately a Claim Notice has to be submitted by Contractor.

▶ Variation Proposal SC13.3 (a) (b) (c) Structure

(a) **Disruption**: proposed work to be performed and program for the execution of the specific activities / operations

(b) **Delay impact on the Critical Path**

Contractor's proposal for any necessary modification to the Programme (SC08.3) and the **Time for Completion**

(c) Contractor's **Costs plus profit** in context with SC12.3 [Evaluation]

▶ **Claim Notice with Claim Request** within the max 42 days period.

The Claim Notice / Request shall be **structured** in compliance with SC 13.3(a), (b) and (c) [**Variation Procedure**]

GCC SC08.3 [Programme] + SC08.6 [Rate of Progress]

- ▶ **Program:** The Contractor shall promptly give notice to the Engineer about adversely effects, which may increase the **Contract price** (Quantity Increases) or “**delay**” the execution of “**Works**” (prolongation on the critical path).
- ▶ **Extension of Time for Completion**
The Contractor is entitled to an Extension of Time for Completion subject to SC08.4 and www.PPE61.de/03.5+ClaimSC.pdf to **adjust the Time for Completion**.
- ▶ **Rate of Progress SC08.3**
 - (a) Contractor’s default in production > expedite progress at his own costs.
 - (b) Employer’s Risk events > **instruction by the Engineer to accelerate the progress**, to catch up delay caused due to SC08.4 / SC08.6 p4 MDB2010 > EMP payment.

Monthly revised Work Programm, to adjust the Tfc

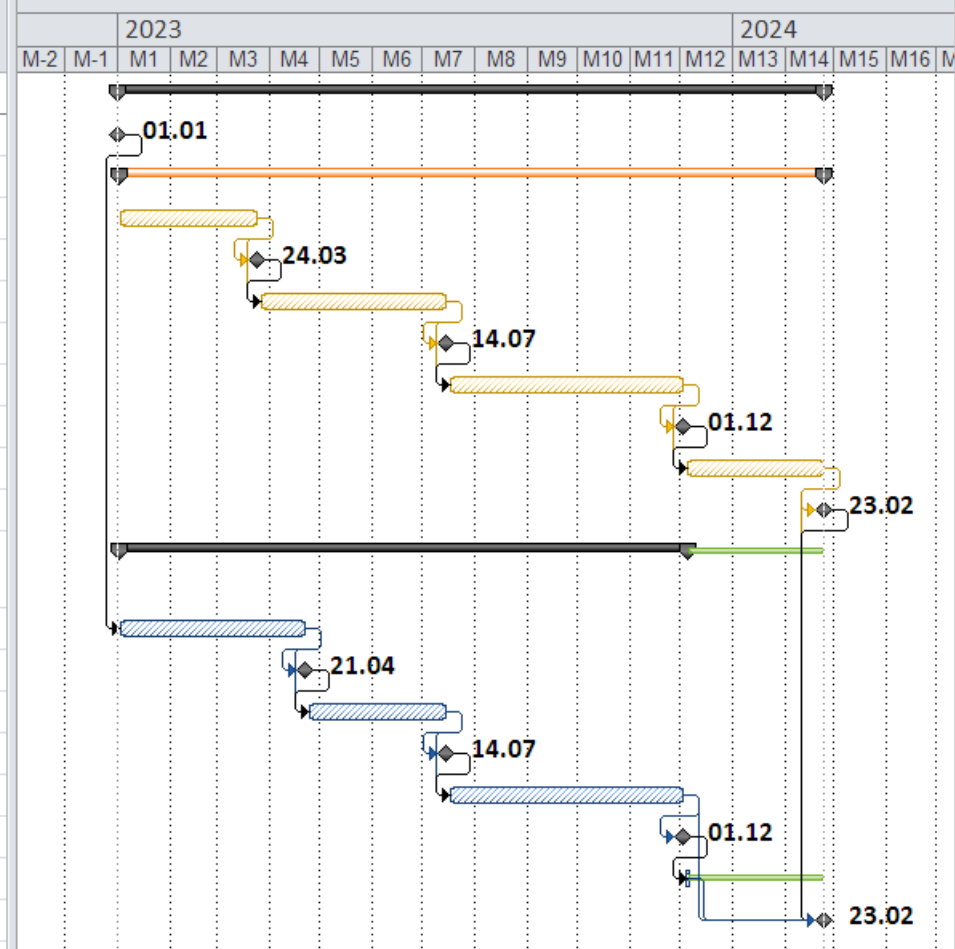
- ▶ **Claim / Variation Proposal** : The Contractor shall promptly give **NOTICE** to the Engineer about adversely affects, which may **increase** the **Contract price** or “**delay**” the execution of “**Works**”.
- ▶ **Adjusted Work Program (AWP) No 1 Jan 2024**
The Contractor submits his adjusted work programs + **Claim on a frequent (monthly) basis**, to show his intentions to complete the Works in compliance with SC08.4. Baseline Program = WP Zero
- ▶ **Claim or VP No 2, No 3, No4 ... plus AWP No 2, No 3, No4.**
Monthly review of the Work Program and the critical path with the Impact on time for completion. **Intelligent Scheduler knows ...**

Time Impact shown on the monthly revised program

- ▶ **Impact on the non-critical path** : The **Disruption** will cause only e.g. Design Cost / **Services**, Design **Approval** times, additional **quantities** / **permanent works** and may prolong the single activity (portal slope, tunnel portal, UPC-additional quantities and duration), but not affect the adjusted TfC of the previous revised Work Program.
- ▶ **Impact on the Critical Path**
The **Design Services**, **Design Approval**, and **increased quantity** of **permanent works** will affect the **Critical path**, and hence the **adjusted Time for Completion**. **The Value- & Time-related expenditures / indirect costs**) can be **claimed** by the Contractor.
- ▶ **Impact on from the sub-critical to the critical path**
The impact on **disruption period** can suddenly be switched to a leading delay months later, with the entitlement to **adjust the current** Time for Completion (TfC).

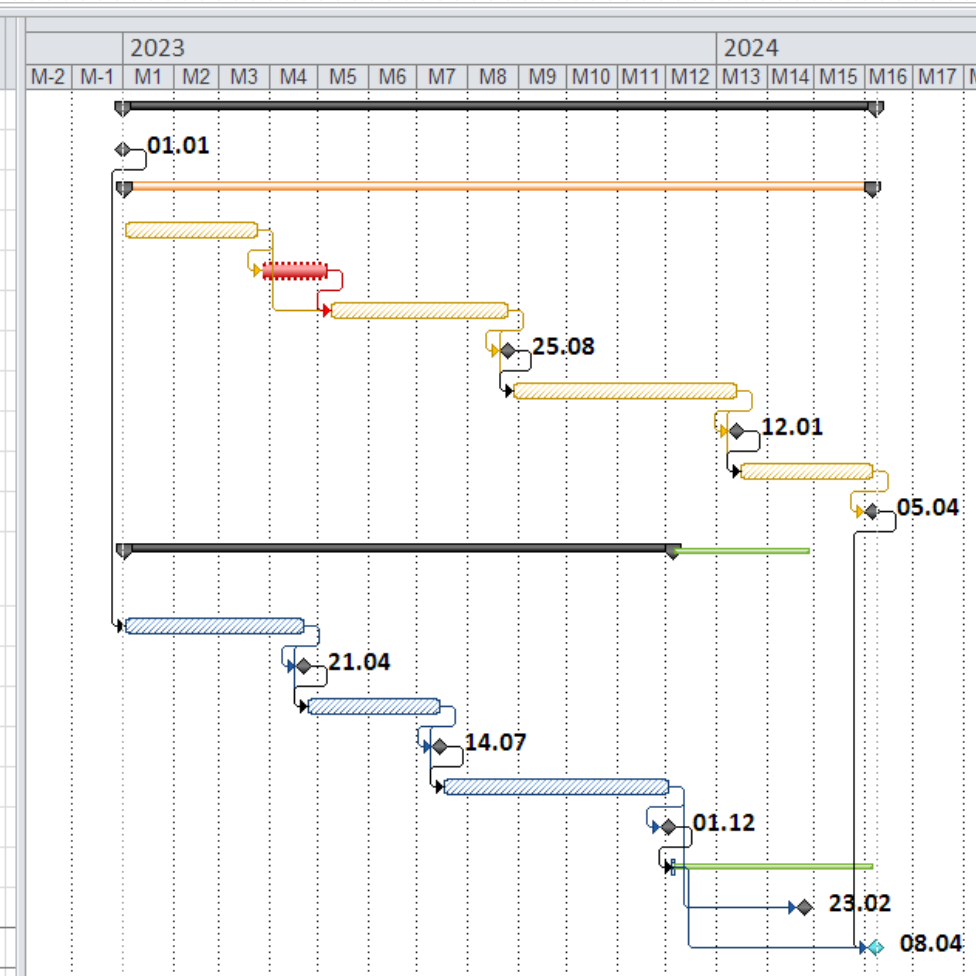
Baseline Program within 28 days (Commencement SC08.1) TfC=23.02.2024

	Task Name	Duration	Design	Approval	Quantity Increase	EoTfC Cost+profit
1	Infrastructure Project	15 mons?				
2	Commencement	0 dys				
3	Portal Slopes Critical path	15 mons				
4	No11	3 mons				
5	Claim / Variation No11	0 mons				
6	No12	4 mons				
7	Claim / Variation No12	0 dys				
8	No13	5 mons				
9	Claim / Variation No13	0 dys				
10	No14	3 mons				
11	Claim Variation No14	0 dys				
12	Protal Slopes Non-Critical path	12,05 mons?				
13	No 21	4 mons				
14	Claim / Variation No21	0 dys				
15	No22	3 mons				
16	Claim Variation No 22	0 dys				
17	No23	5 mons				
18	Claim Variation No23	0 dys				
19	Free Float / Non Critical	0,05 mons?				
20	Completion	0 dys				



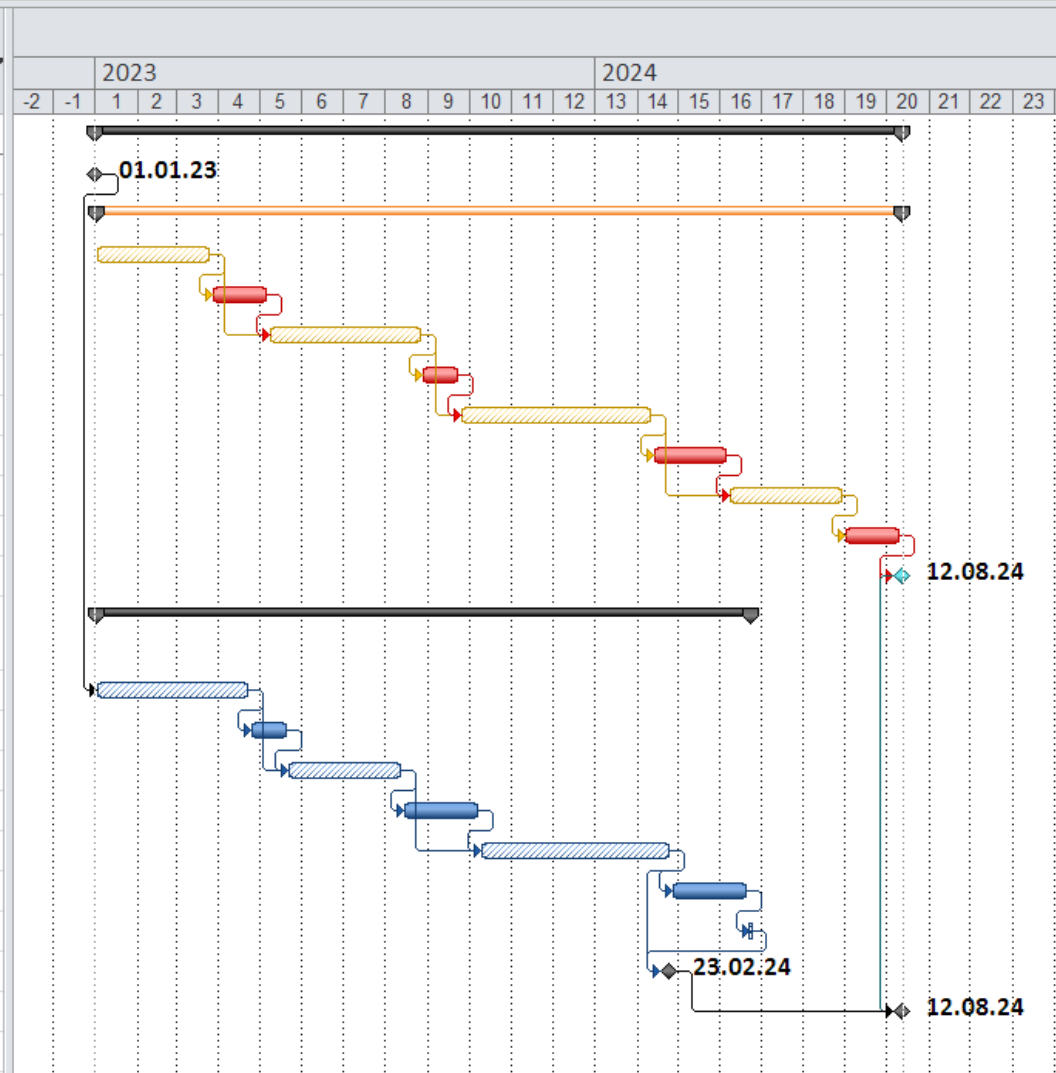
Delay on the Critical Path Slope ONLY > 1st VP / Claim for EoTfC

	Task Name	Duration	SuC	Design	Approval	Quantity Increase	EoTfC lost+profi
1	▣ Infrastructure Project	16,5 mons?					
2	Commencement	0 dys	13				
3	▣ Portal Slopes Critical path	16,5 mons					
4	No11	3 mons	6;5				
5	Claim / Variation No11	1,5 mons	6	3w	1 w	0,5 w	1,5 m
6	No12	4 mons	8;7				
7	Claim / Variation No12	0 dys	8				
8	No13	5 mons	10;9				
9	Claim / Variation No13	0 dys	10				
10	No14	3 mons	11				
11	Claim Variation No14	0 dys	21				
12	▣ Protal Slopes Non-Critical path	12,05 mons?					
13	No 21	4 mons	15;14				
14	Claim / Variation No21	0 dys	15				
15	No22	3 mons	17;16				
16	Claim Variation No 22	0 dys	17				
17	No23	5 mons	20;18				
18	Claim Variation No23	0 dys	19				
19	Free Float / Non Critical	0,05 mons?	21				
20	Baseline Finish = 23.02.2024	0 dys					
21	Adjusted EoTfC	0 mons					



Delay on the Critical Path Slopes ONLY > 1st, 2nd, 3rd and 4th VP/ EoTfC Claim

Task Name	Duration	Design	Approval	Quantity Increase	EoTfC lost+profit
Infrastructure Project	21 mons?				
Commencement	0 dys				
Portal Slopes Critical path	21 mons				
No11	3 mons				
Claim / Variation No11	1,5 mons	3w	1 w	0,5 w	1,5 mo
No12	4 mons				
Claim / Variation No12	1 mon	2w	1w	1w	1,0 mo
No13	5 mons				
Claim / Variation No13	2 mons	4w	1w	3w	2,0 mo
No14	3 mons				
Claim Variation No14	1,5 mons	3w	1 w	0,5 w	1,5 mo
Adjusted EoTfC	0 mons				
Protal Slopes Non-Critical path	17,05 mons?				
No 21	4 mons				
Claim / Variation No21	1 mon	1w	1w	2w	ZERO
No22	3 mons				
Claim Variation No 22	2 mons	3w	2w	3w	ZERO
No23	5 mons				
Claim Variation No23	2 mons	2w	2w	4w	ZERO
Free Float / Non Critical	0,05 mons?				
Baseline Finish = 23.02.2024	0 dys				ZERO
Adjusted EoTfC = 12.08.2024	0 mons				
Total Time affect		16 w	9 w	14 w	6,0 mo



Impact Analysis of the Disruption/Delay on the Critical Path

The sample shows the “four revised” Work programs - with sequences and dependencies -, submitted with a **Claim Notice on a monthly basis** to demonstrate/to monitor the documentary evidences of the Disruptions + Delays.

- ▶ **Cause –Effect** relationship e.g. Earthwork Portals only.
- ▶ Duration of **Exploratory works** and **Design services**
- ▶ Duration of the **Approval** times
- ▶ Duration of **Increase of Quantities / Resumption** of works
i.e. 3-5 days
- ▶ **If on a critical path, the Time- and Value related costs + profit / indirect costs have to be compensated by the Employer.**

Cost + Profit Valuation for Claim Reasons + Variations (SC13.1)

21	Baseline Finish = 23.02.2024	0 dys				ZERO
22	Adjusted EoTfC = 12.08.2024	0 mons				
23	Total Time affect		16 w	9 w	14 w	6,0 mo

- ▶ **Services** (Deployment, Site, Site Meetings) for “one” Variation:
3 experts for design services for 2 months @ 25.000 Euro/expert + months= 150.000 €
- ▶ **Exploratory works** > drilling costs are re-measured and paid by BoQ, clarify Proposal.
- ▶ **Approval Times** disrupts/delays the Construction operations > **VTR/IDCs**
- ▶ **Quantity increase** leads to prolonged construction time
Re-measured and paid in BoQ > impact of EoTfC considered in the calculation below
- ▶ **EoTfC** entitles for Cost + profit (SC12.3) at the time of occurrences.
Assumption: 10 Mill Euro Earnings E per Mont, **VTR-C/IDC per month/12%*E=>1,2 Mill €**
IDC/month > 2 months delay due 1 Variation @ Value+Time-Related VTR-Cost [=IDC]
=> 2,4 Mill Euro Claim for one Variation due to change of Design.

Non-Compliance ... why?

- ❖ Employers, Designers, Engineers and Contractor's Representatives are **incapable to abide** by the Rules of FIDIC law in the course of design modifications and supervision.
- ❖ **Deliberately** by-passing the Rules for actions of embezzlement, fraud and corruption
- ❖ Method of Measurements for **Quantity Increase, non-defined provisional sums** to chop money (100% build, 200% measured, and 200% paid) and **overpaid by IDC / unproductive C.**
- ❖ **Sub-Contracting / Design + Specification changes by Employer**
Material brokerage, Equipment rental commission, Labour lease PROVISIONS and Supervision of Staff exchange / financial management.
- ❖ **Untalented professionals who are blind** or join the Cartel of Silence, with the expectation to get a bread crumb underneath the table (www.ppe61.de/OLAF1.pdf)

We support accountable, honest and talented professionals:

www.ppe61.de/15.6+Trustee.pdf ... We can be nasty and blackmail, too.

*** Everybody knows KBG, FSB, CiA, ... but nobody knows UWFD, the magic weapon acc. to Xi Jinping.

CPI 2021 Transparency International

<https://www.transparency.org/en/cpi/2021>

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corruption**

**Donate to
chapter**

Advocacy and Legal Advice Centre in Georgia

We have an ALAC in Georgia that can be contacted to [report corruption](#).
ALACs provide free and confidential legal advice and allow people to safely report corruption.

Who has NOT expected it ?

Georgia / Caucasus

gets along a

non-law abiding way

CPI 2021 Transparency Interational <https://www.transparency.org/en/cpi/2021>

Scores / Rank = Corruption Perception Index CPI 2021

88 / 1 Denmark / New Zealand

80 / 10 Germany

56 / 42 Italy

55 / 49 Georgia

49 / 58 Armenia

45 / 66 China

40 / 85 India

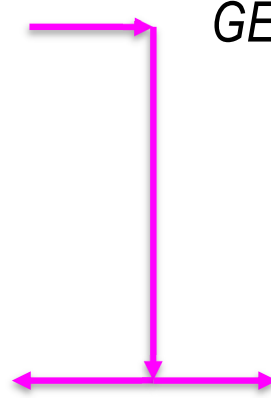
38 / 96 Turkey

32 / 122 Ukraine

30 / 129 Azerbaijan

29 / 136 Russia

GE: wrongly accessed, *political reasons, Bio R+D LAB !!!*



<<< 34 / 115 Sierra Leone

GE: *reality on ground-evaluation, Rank 96 !!!*

<<< 29 / 136 Liberia / West Africa.

**No Delay Damages will be applied
for Chinese Contractors due to the fact,**

A _ Rule of Law is not fully applied

B _ Bazaar Methodologies are applied
in Contract Administration

C _ UWFD *** knows everybody, everything, and

D _ will blackmail the culprits, if they do not obey.

*** Everybody knows KGB, FSB, CiA, Mi5, ...

but nobody knows UWFD, the magic weapon acc. to Chinese President Xi Jinping.

We support accountable, honest and talented professionals:

www.ppe61.de/15.6+Trustee.pdf

Besides, Actors / Parties are happy, too ... if the Procurement Department requested: “All Preliminary + General Provisions” (Bill No 1) shall incorporated in the Unit Rates of Permanent Works

>>> Can you identify the advantages?

- A _ Any Quantity increase in the BoQ overpays the permanent Works by at least by 25% indirect costs IDC: Unit Rates already includes the monthly IDC for *site mobilization, demobilization, time and value-related costs during implementation* i.e. Provisional Sums / Contingencies with an amount of e.g. 33 Mill Euro utilized for compensation of permanent works OVERPAYS the Contractor by 8,25 Mill Euro (min 25%)
- B _ A good bargaining power for sharing 50% to 50% or 33%:33%:33% between the Parties.
- C _ Why shall the Contractor claim Extension of Time for Completion / EoTfC?
The Contractor gets indirectly paid the prolongation time due to “overpriced Unit Rates, (market price+indirect costs, due to non-separated iTfC-measurement of P&G Provisions).

Vulnerable Information

A _ Design: www.ppe61.de/S+DesignResponsibility.pdf

B _ Award: www.ppe61.de/S+ByPassCompetition.pdf

C _ Potpourri Contract: www.PPE61.de/HUB123.pdf

Scope of Services: **CONSTRUCTION- + COMMUNICATION- + CONTRACT Management**
to meet **Compliance** and **Transparency**
in order to render **excellence** / best practice.

Time-, Resource and Cost Planning, Tracking + Trending, M&E, MTR, ROM,
Technical and Financial Audits.

Inquire Emma@PPE61.de

www.PPE61.de/01.15+Audit.pdf